

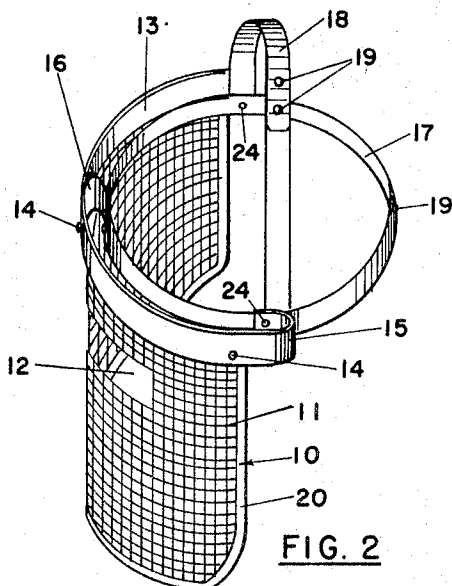
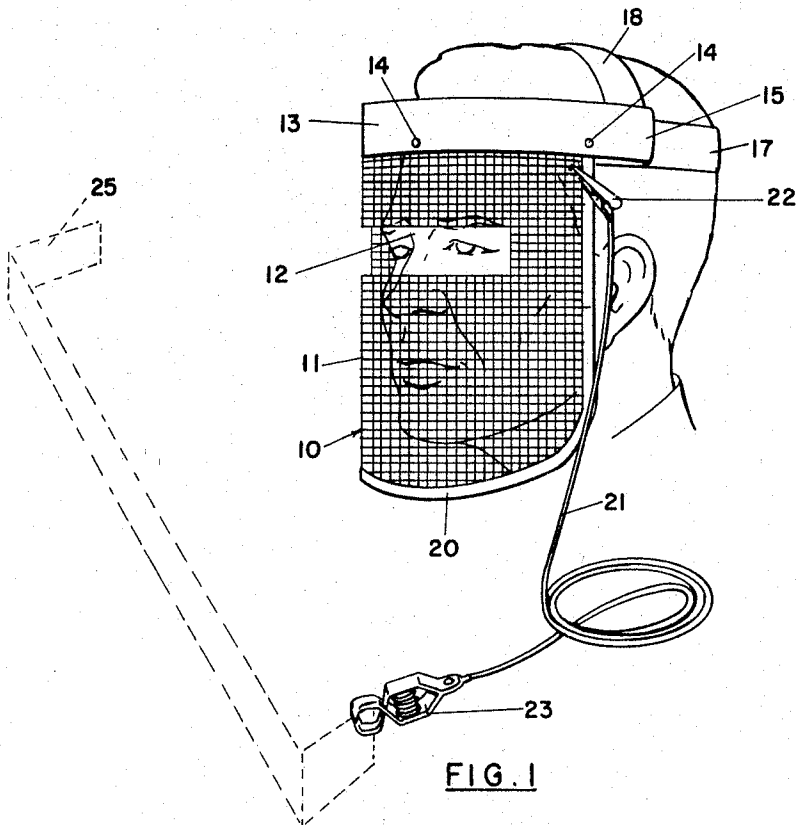
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SHIELD FOR ELECTROSTATIC PAINTING

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SHIELD FOR ELECTROSTATIC PAINTING

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4 Claims. (Cl. 317-2)

This invention relates to shields and, more particularly, to shields in the form of face masks used for protecting the faces of persons exposed to electrically charged paint fumes.

In electrostatic painting, the work to be painted is charged with a certain electrical potential and paint spray from the paint gun is charged with another potential so that the charged paint particles will be attracted to the article being painted. During this operation, paint fumes deposit on the face of the painter and on other exposed surfaces and result in a very unpleasant condition.

It has been discovered that by providing a paint mask of electrical conductive material, supporting the mask over the face of the operator, and connecting the mask to a ground potential or even to the body of the operator, the electrostatically charged particles of paint will not pass through the openings in the mask and, therefore, the face of the painter will be protected.

It is, accordingly, an object of the present invention to provide an improved paint mask.

Another object of the invention is to provide a shield for electrostatic painting with means thereon for connecting the shield to an electrical potential which will repel the electrostatically charged particles.

A further object of the invention is to provide a paint mask which is simple in construction, economical to manufacture, and simple and efficient to use.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportions, and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

FIG. 1 is a view of a paint mask according to the invention; and

FIG. 2 is a view similar to FIG. 1 of the paint mask taken from above.

Now with more particular reference to the drawing, a paint mask is indicated generally at 10. It has a wire mesh face shield portion 11 which is made of a material which is conductive of electricity such as metal. A sight opening 12 is cut in the front of the mask and the margin of the wire mesh has a wire mesh edge border portion 20.

The wire mesh face shield portion is held on the operator's head by means of a head gear made up of a top mesh support 13 attached by means of rivets 14 to the mesh. The top mesh support 13 has U-shaped ends 15 which are bent back on themselves and riveted to a head band 17.

The head band 17 is connected together by means of adjusting snaps 19 and is fastened to the inner part of a top head strap 18 by means of rivets 24. The adjusting snaps 19 are connected to the top head strap 18 and the head band 17 so that the head band and strap can be adjusted to accommodate different sized heads.

A conductor member in the form of ground wire 21 is connected to the wire mesh face shield portion 11 by means of a clip 22. The distal end of the ground wire 21 has a clip 23 thereon which can be connected to a member of an electrical conductive material indicated by dotted lines at 25. This electrical conductive material will have an electrical charge the same as that of the

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paint fumes and, therefore, the fumes will be repelled when propelled from a gun or dispenser.

Thus, the paint fumes entrained in the air will be repelled from the paint mask. The face of the painter will be maintained in a clean condition so that the unpleasant condition of paint usually deposited on the operator's face will not be encountered.

The principle disclosed herein has many other applications than that specifically disclosed herein.

The foregoing specification sets forth the invention in its preferred practical forms but the structure shown is capable of modification within a range of equivalents without departing from the invention which is to be understood is broadly novel as is commensurate with the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. In combination, a shield made of electrical conductive material and a source of particles electrically charged to a given polarity,

said shield having means thereon to support it over the body of a person, openings in said shield to allow a person to see there-through,

and an elongated electrical conductor means attached to said shield,

said elongated electrical conductor means having a connection means on the distal end of said elongated electrical conductor means for attaching said elongated electrical conductor means electrically connected to a device at the electrical potential of said particles.

2. A face shield having a face protective member of electrical conductive screen material,

means to support said face shield on the head of a person,

an elongated electrical conductor connected to said face protective member,

and means on the distal end of said elongated electrical conductor for connecting it to a member of conductive material.

3. A face shield for use in electrostatic painting for protecting the face of a painter from paint spray comprising

a face cover having an opening therein to be disposed adjacent the painter's eyes,

the portion of said face cover around said opening being made of electrical conductive material,

an elongated electrical conductor attached to said electrical conductive material,

and means attached to said elongated electrical conductor for connecting it to a member of the same electrical potential as said paint spray.

4. A face mask adapted to be used with a spray paint dispenser,

an electrical conductor connected to said face mask and adapted to be connected to said dispenser whereby said face mask is maintained at the potential of the spray from said dispenser.

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