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PROCESS FOR CLEANING SPRAY BOOTHS

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Our invention relates to a new and useful improvement in a process for cleaning the inner surface of spray booths. The invention relates particularly to cleaning spray booths in which various articles are placed for painting, the paint being applied by means of the spray gun. When the article is sprayed with the paint or finish, a large quantity is deposited upon the surfaces of the side walls and to some extent, on the ceiling and floor. When this deposit has become of a certain thickness the spray booth then becomes a very serious fire hazard, and it is necessary to remove the accumulations. Owing to the difficulty of removing the accumulations on the side walls, etc., the deposit is permitted to gather until it is of a thickness or depth beyond that which would be reasonably safe so that while the spray booth is being used there is considerable danger.

These spray booths are generally constructed of metal, or at least lined with metal, to facilitate the removal of the accumulations on the side walls thereof, and in scraping this accumulation from the side walls frequently a fire breaks out, either resulting from a spark struck by the scraping tool or by the friction generated as the scraping tool is moved over the surface.

It is an object of the present invention to provide a simple and easy method or process of removing this accumulation from the walls, and to reduce the fire hazard to a minimum, and render the operator's conditions safe to the maximum degree.

It is another object of the invention to provide a method or process of removing the accumulations from the surfaces mentioned with a maximum efficiency and a minimum labor cost.

It is another object of the invention to provide a preparation which may be applied to the surfaces prior to the spraying operation which will permit a quick and easy removal of the accumulations from the surfaces.

In carrying on the process and the preparing of the spray booth, we apply to the surfaces of the spray booth, that is, the inner surface of the walls, particularly, a layer of material which is specially prepared to cling to the surface and afford a surface upon which the paint and other finish may accumulate so that when it is desired to remove the accumulation from the surfaces this specially prepared material is easily and quickly removed, carrying with it an accumulation of paint or finish which may have been deposited thereon.

This preparation preferably consists of pigment 10 parts, sulphonated castor oil 10 parts, glycerine 10 parts, mineral oil 35 parts, water 35 parts, alcohol one-half part, together with a small amount of coloring material in the form of a suitable dye. The proportions given are approximate, sufficiently to enable those skilled in the art to compound the preparation.

This preparation comprising the ingredients mentioned, thoroughly mixed, is applied to the inner surface of the spray booth upon which the paint or finish may accumulate so as to coat the surface. After the spraying operation is completed, this preparation may be easily and quickly removed from the inner surface of the spray booth, carrying with it such accumulation as may have been deposited thereon. In the removal of this material a hose directing hot water or steam against the material may be employed, this hot water or steam very quickly removing the material, leaving the surfaces clean and entirely free from the accumulations of paint or finish. Cold water, under pressure, may also be used, if desired, although it will be found that hot water or steam is more efficient. The preparation is such that it may be removed by a stream of water, so that it may be said to be, in this regard, water soluble, this term being used to indicate that the water will lessen its adhesive qualities sufficiently to effect its removal from the surfaces upon which it may have been applied.

The ingredients set out are set out in the proportions which are preferable, but it is believed evident to those skilled in the art, that substitutions of some of the ingredients may be made without departing from the spirit of the invention, and that the exact

proportions given may be departed from to some degree.

The pigment is utilized as a filler and prevents the lacquer from penetrating the coating. The mineral oil and the glycerine are used for retaining the coating in a soft condition so that it may be easily removed, and in this connection it may be stated that the removal of the material may be effected with a scraping tool, as well as in the manner indicated. The glycerine, in addition to keeping the material soft, has a tendency to take up water.

The alcohol acts as a solvent for the oils and the glycerine, rendering these miscible in each other, and the water acts as a vehicle to carry various ingredients, the water, after application, evaporating and allowing the material to properly set. Consequently, it is believed evident that saponifiable matters may be used, such as soaps, and the like, instead of the glycerine and castor oil so as to form an emulsion of the water and the oils. To substitute for the glycerine and castor oil, and to a certain extent, some of the mineral oil, carbohydrates, such as starches, dextrins, sugars, etc., may be used. The water acting as a vehicle or thinner, may also be substituted with such material, as turpentine.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. The process of removing paint and finish from the inner surface of spray booths consisting in applying, prior to the spraying operation, on the inner surface of said spray booths, a protective coating of water soluble material and removing said protective coating from said surface subsequent to the spraying operation by forcibly bringing water or steam into contact with said coating.

2. The method which comprises applying to the surface of the walls of a spray booth a coating of a water soluble adhesive compound, and subsequently removing said coating together with paint, lacquer or the like collected thereon with a fluid containing water.

In testimony whereof we have signed the foregoing specification.

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