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ART OF OIL PAINTING RESTORATION

George T. Oliver, Kennebunk, Maine

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This invention relates to the art of the restoration of oil paintings on canvas in which the restored painting is mounted upon a suitable reinforcing backing and involves certain novel steps in the restoration of the painting prior to such mounting. The art of restoration of oil paintings is an ancient one and involves the greatest care and expert treatment. If the paint film has become cracked or is in a loosened or peeling condition so that the surface of the film is broken or uneven, it is necessary that the paint film shall be brought to a smooth, even surface before being mounted upon the new reinforcing backing. If the paint film has become loose or is peeling from the canvas, whether or not it is cracked or broken, or if the canvas has deteriorated so as to afford an insufficient support for the paint film, it is necessary that the paint film and the canvas shall be permanently secured together with the paint film in a smooth even condition before the painting is mounted on the new reinforcing backing.

The present invention presents novel processes for securing these results and is independent of any treatment which may be necessary for the restoration of the color or other characteristics of the painting and is preliminary to any such treatment as well as preliminary to the subsequent mounting upon a new reinforcing backing.

The object of the invention is to provide processes for bringing the paint film to a smooth even surface and for effecting a durable and permanent union of the paint film to the canvas which may be employed separately or in conjunction, depending upon the requirements of the particular painting and which may be carried on without any danger of injury to the paint film during the process of restoration and which shall have no deleterious subsequent effect upon the painting.

The objects and nature of the invention will appear more fully from the following disclosure of the preferred forms of the processes and of the resultant product and will be particularly pointed out in the claims.

In carrying out the process, if as a result of age or other conditions the film of paint on the canvas has become cracked or is loosened or peeling so that the surface of the film is not in a smooth and even condition, it is first brought into a permanent smooth even condition. This part of the process is effected in the present invention by, first, wetting the canvas and, second, by then drying the painting under pressure to eliminate moisture and to bring the paint film to the required smooth surface. The step of wetting the canvas may be performed in any convenient man-

ner, such, for example, as by brushing, sponging, or spraying the canvas on the back with water or by the application thereto of a dampened cloth or felt. In the step of drying under pressure, the painting may be subjected to the required pressure by means of weights or by the use of a suitable press and with or without the application of heat. But in any event, the amount of pressure and the time of application and the temperature must be sufficient to smooth out cracks or other blemishes and bring the paint film to a smooth, even surface in contact with the canvas, to dry out all moisture from the canvas and to prevent shrinkage of the canvas.

This portion of the process is novel in itself and may be followed by other desired processes of restoration and is preliminary to a subsequent process of mounting the treated painting by the aid of a suitable adhesive upon a new reinforcing backing, such, for example, as a new sheet of canvas or a panel of wood or other suitable material.

The invention also provides either in connection with the features just described or independently thereof for the permanent securing of the paint film to its canvas. In this portion of the process the canvas is impregnated with a suitable material which will act permanently to secure the paint film to the canvas and which is devoid of solvents or other components which change their characteristics deleteriously with time or which act to impair the painting. A preferred material for this purpose is a compound of a suitable wax and resin devoid of solvent or other components of a deleterious character. While various waxes and resins in the broader aspects of the invention may be employed in the carrying out of this step, preferably a mixture of beeswax and rosin is employed.

The rosin known on the market as "cherry rosin" is excellent for this purpose and a desirable mixture is two parts by weight of beeswax to three parts by weight of such cherry rosin. The important characteristic of this compound is that it is devoid of solvents or other components which would have either during the impregnation or during the subsequent life of the painting a deleterious effect upon the paint film.

In carrying out this portion of the process, the canvas is preferably impregnated by applying the compound to the back of the canvas in either a solid or melted condition. Heat in some form and preferably pressure also are employed to secure the thorough impregnation of the canvas with the compound. This may be done in any suitable

manner such, for example, as by the use of warm irons or by placing the painting upon a heated surface. The operation is carried on until the compound thoroughly impregnates the canvas, engages the paint film and permanently secures it to the canvas in a smooth, even condition.

The great advantage of the use of such a compound of wax and resin, and more preferably of beeswax and rosin, is that it effects a permanent union of the paint film and the canvas and maintains this union unchangeable without injury to either the paint film or the canvas under all conditions to which such oil paintings are ordinarily subject. A further advantage inheres in that such a compound can, when required, be readily removed without injury to the paint film should such removal thereafter become necessary for any reason. If the paint film has become cracked, broken or uneven and is loosened or peeling from the canvas, both features of the process are sequentially employed, thus effecting the bringing of the paint film to a smooth, even surface and securing the permanent union of the paint film to the canvas by the use of a material which will not change its characteristics deleteriously with time which will not impair the painting.

After either or both of the features of the process of this invention have been carried out, the treated painting is then superposed and mounted upon a suitable reinforcing backing of canvas or a panel of wood or other material by means of a suitable adhesive. And before or after such mounting, such treatment for conditioning or effecting the restoration of the color of the painting may be carried out.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is:

1. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of bringing the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas, and impregnating the canvas with, material acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

2. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of bringing the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas, and impregnating the canvas with, a compound of wax and resin acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

3. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of bringing the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas, and impregnating by the aid of heat and pressure the canvas with, a compound of beeswax and rosin

acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

4. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of wetting the canvas; drying under pressure to eliminate moisture and to bring the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas, and impregnating the canvas with, material acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

5. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of wetting the canvas; drying under pressure to eliminate moisture and to bring the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas, and impregnating by the aid of heat the canvas with, a compound of beeswax and rosin acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

6. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the step of applying to the back of the canvas, and impregnating the canvas with, a compound of wax and resin acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

7. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the step of applying to the back of the canvas, and impregnating by the aid of heat and pressure the canvas with a compound of beeswax and rosin acting permanently to secure the paint film to the canvas and devoid of components which change their characteristics deleteriously with time or impair the painting.

8. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the step of wetting the canvas; drying under pressure to eliminate moisture and to bring the cracked, loosened or peeling paint film to a smooth, even surface.

9. In the process of the restoration of oil paintings on canvas and preparatory to the adhesive mounting thereof upon a reinforcing backing, the sequential steps of wetting the canvas; drying under pressure to eliminate moisture and to bring the cracked, loosened or peeling paint film to a smooth, even surface; and applying to the back of the canvas a compound consisting of substantially two parts of beeswax and three parts of rosin by weight; effecting the impregnation of the canvas with said compound by the aid of heat and pressure and thereby the permanent securing of the smoothened paint film to the canvas.

GEORGE T. OLIVER.