This invention relates in general to paint coatings and more particularly to a process and material for producing mat surface coating applicable to a wide variety of surfaces.

A particular use for the material to be described is the camouflaging of military equipment, helmets, and the roofs of airplanes hangars or the like. The coating to be described may be modified to fulfill requirements for light-weight, resistance to abrasion, light absorption, and simplicity of application. The material has the additional quality of not only absorbing infra red rays but uniformly diffusing light projected thereupon, whereby a surface thus coated is relatively difficult to photograph.

Materials herefore used for this purpose usually comprised a mixture with a paint base of pulverized cork, wood fiber or sand particles. The physical characteristics and behavior of these materials were objectionable in use principally because of the lack of bond between the particles and the paint base, the lack of wear-resistant qualities, and the difficulty in obtaining uniform textures. All of these objections are overcome in the present invention in which a principal object is the process of forming a coating having a mat surface of uniform texture resulting from the close bonding of pre-graded nut shell flour with a surface and a subsequent application of pigment-carrying paint or lacquer thereon for producing desired color effects.

It is another object of the invention to provide a mixture of a paint base and pre-graded nut shell flour in the form of a viscous liquid for application to surfaces.

These and other objects and advantages will appear in the following description and claims.

In a preferred form, the surface to be coated is given a priming coat of air-drying paint or lacquer and while this coat is in a "tacky" condition, a pre-graded granulated nut shell flour is dusted uniformly thereon. The nut shell particles will embed themselves in the priming coat and thus be held in close proximity with each other on the surface. The resultant coating is preferably oven-baked in order to firmly bond the particles and complete the drying of the prime coat.

After the above drying operation is completed, one or more coats of paint or pigment-carrying lacquer is sprayed on the resultant surface to coat the nut shell particles and to obtain a desired final shade of color.

A particular application for the above-described coating was prepared for the United States Government military helmets in which walnut shell flour graded through a 12 to 20 mesh screen was applied to the priming coat and after baking, two coats of synthetic standard olive drab enamel were sprayed upon the surface. The resultant coating proved to be extremely wear-resistant, light-diffusing, and did not add excessively to the weight of the helmets.

Another modification of the coating material includes the application of clear or translucent adhesive to the surface and after the application of nut shell flour, to cover the resultant mixture sprayed directly upon the surface to be coated with a spray gun having a special nozzle.

Although this invention has particular merit as a camouflaging paint, other useful and ornamental effects may be obtained. A particular application for the present invention is found in taking advantage of the light-diffusing characteristics in covering irregular or defective surfaces whereby such irregularities and defects are not apparent to the eye.

Having described my invention, I claim:

1. A process of applying granular coatings to surfaces including the application of a film of an air-drying adhesive said adhesive comprising a mixture of cementitious material and volatile products to the said surface and while the said adhesive is still in a viscous state, the dusting of pre-graded nut shell particles thereupon and subsequently applying a coat of said adhesive over the dusted surface.

2. A process of applying granular coatings to surfaces including the application of a film of air-drying adhesive said adhesive comprising a mixture of cementitious material and volatile products to the said surface and while the said adhesive is still in a viscous state, the dusting of pre-graded walnut shell particles thereon and heating the dusted surface to dryness and then applying a coat of air-drying, color-carrying cementitious compound to the dusted surface.

3. A coating material for surfaces comprising a layer of air-drying adhesive said adhesive comprising a mixture of cementitious material and volatile products, a layer of nut shell flour particles of substantially predetermined size em-
bedded in said adhesive and a covering film of a
dryable cementitious compound.

4. A coating material for surfaces comprising a
layer of air-drying adhesive said adhesive com-
prising a mixture of cementitious material and
volatile products, a layer of nut shell flour par-
ticles of substantially predetermined sizes em-
bodied in said adhesive and a covering film of a
dryable cementitious compound ground with
color pigment.

5. A coating material for surfaces comprising
a cementitious material mixed with volatile pro-
ducts and nut shell particles of substantially pre-
determined size.

6. A coating material for surfaces comprising
a mixture of air-drying lacquer, ground with color
pigment, in combination with nut shell particles
of substantially predetermined size.

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