## UNITED STATES PATENT OFFICE.

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## PROCESS OF PRODUCING SURFACES IN IMITATION OF GRAINING.

No. 839,363.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed June 23, 1906. Serial No. 323,032.

To all whom it may concern:

Be it known that I, FORD M. CLAPP, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Processes of Producing Surfaces in Imitation of Graining, of which the following is a full, clear, and exact description, reference being had to the accompany-

to ing drawings.

In graining wood with a graining-tool it has heretofore been customary to take a graining pigment varying in color with the different kind of wood to be represented, this pigment 15 being in a dry form and when used being diluted with vinegar or stale beer or some similar reducer. This has always been inconvenient. The beer or vinegar has a sour unpleasant odor, is liable to ferment, the di-20 lution must be made at the time of use, and the amount of dilution varies the color, with the result that frequently various parts of the same grained floor present a different appearance. Grainer in the form of a paste 25 thinned with drier and turpentine or benzene has been used; but it is not adapted for application by a graining-tool and requires considerable skill in its use.

I have devised a graining compound which 30 may be kept in stock ready mixed for use and may be applied by a graining-tool without requiring any special skill on the part of the user. Furthermore, I have devised a system of using it whereby the same graining 35 compound may be employed to represent all sorts of woods. This I accomplish by applying a colored translucent varnish to the lightcolored graining compound on a still lighter

The method of applying the composition is hereinafter more fully described and the essential characteristics set out in the claims.

I make the pigment of my graining compound of substantially equal portions of raw sienna and whiting. These are mixed to-45 sienna and whiting. gether and grounded in water sufficient to make a thin paste. This paste is then diluted with alcohol to the proper consistency for use. The composition itself is covered in 50 my divisional application, Serial No. 333,183, filed September 4, 1906.

ground coat of light-straw color. After this is dry the graining compound is applied. This is a light-yellow color and when dry is 55 hardly perceptible on the light ground, presenting the appearance simply of streaks With a colored transparent varthereon. nish applied to it, however, it gives a beautiful natural grain to the wood. The tint of 60 this varnish depends on the wood it is intended to imitate—yellow for oak, brown for walnut, red for cherry, &c. In each case the same graining compound may be used.

One of the advantages of my system is 65 that there need be no special skill on the part of the user, as with ordinary graining. There is no mixing or thinning of the materials. It is simply necessary to apply them with

brushes and a graining-tool.

The alcohol in the compound not only forms a drier, but prevents creeping, so that the graining pigment retains its form when it dries. This pigment does not adhere like paint, but is retained in place by the varnish 75 over it.

I claim

1. The process of producing surfaces in imitation of graining, consisting in applying to the surface a graining compound carried 80 by a volatile vehicle, allowing such vehicle to evaporate and applying over the graining compound a colored varnish.

2. The process of producing surfaces in imitation of graining, consisting in applying 85 a ground coat, applying over this a graining compound carried in a volatile vehicle, allowing such vehicle to evaporate, and applying over the graining compound a varnish to.

bind the graining compound.

3. The process of producing surfaces in imitation of different grained woods, consisting in applying a graining compound constant for various woods and applying over this a varnish having a color selected according to 95 the wood to be imitated.

4. The process of graining consisting of applying a ground coat of light-straw color, then forming on this graining streaks of light-yellow compound, then applying to this 100 a colored varnish.

5. The process of producing imitation rained surfaces, consisting in applying in a In applying the grainer I first apply a liquid form a graining compound consisting

of permanent earths carried by a quicklyevaporating vehicle, allowing such compound to dry, and then applying over the same a varnish carrying a pigment selected according to the wood to be represented.

6. The process of graining consisting of mixing substantially equal portions of raw sienna and whiting, grinding the same in water, thinning it with alcohol, applying the

same to a ground coat, and covering it with 10 a colored varnish.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

FORD M. CLAPP.

Witnesses:

ALBERT H. BATES, G. H. MYERS.