UNITED STATES PATENT OFFICE.

JOHN C. ORTH, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO CLARENCE H. COLLINGS, OF SAME PLACE.

PROCESS OF FINISHING WOOD SURFACES.

SPECIFICATION forming part of Letters Patent No. 415,553, dated November 19, 1889.

Application filed March 16, 1889. Serial No. 303,567. (Specimens.)

To all whom it may concern:

Be it known that I, JOHN C. ORTH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in the Art of Finishing Wood Surfaces, of which the following is a full, clear, and exact description.

The object of my invention is to give to a wood surface a novel and attractive finish, which will adapt it particularly to ornamental uses, such as for picture-frames, mantels, furniture, &c.

To this end it consists of the various manipulations in the order named, which are hereinafter described.

After the surface of the wood is made smooth it is stained any desired color. The aniline dyes mixed with alcohol may be used for this purpose, as may also other staining-solutions; but paint or mixtures containing a solid pigment, if used at all, should be applied in a very thin coat, because otherwise they would tend to fill up the depressions made by the natural grain of the wood. After the stained wood is dried it is given a thin coating of some transparent varnish, preferably white shellac dissolved in alcohol, which coating, when it has become hard, prevents the bronze from adhering to the surface of the wood during the next step of the process. When this coating of shellac has thoroughly dried and hardened, a mixture of bronze powder with linseed-oil and turpentine is rubbed upon the surface until the depressions formed naturally by the grain or otherwise are filled. The surface is then cleaned and the wood is set to dry. When the oil and turpentine have evaporated, the depressions are left filled with the bronze, and a very beautiful effect is produced thereby. The surface of the wood is then coated with a thin transparent form of varnish. Gum-benzoin dissolved in alcohol is the form of varnish which I have used with the most satisfactory results, because it gives a bright glossy finish to the wood and does not dim the brilliancy of the bronze, but, on the contrary, seems to increase it.

The materials I have mentioned are those which, after many experiments, I have found best suited to the purpose named; but I do not intend to limit my invention, as claimed in the first claim, to the use of these precise materials, since other materials may be employed to produce analogous though less satisfactory results.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described process of finishing wood surfaces, which consists, first, in staining the wood surface; second, in coating the same with a transparent varnish and allowing said varnish to become dry and hard; third, in rubbing the surface with bronze powder mixed with a suitable vehicle until the depressions in the surface are filled, and then allowing the vehicle to evaporate, and, fourth, in coating the surface with a transparent varnish, substantially as and for the purpose specified.

2. The herein-described process for finishing wood surfaces, which consists, first, in staining the wood surface; second, in coating the same with a transparent varnish and allowing said varnish to become dry and hard; third, in rubbing upon the surface a mixture of bronze powder, linseed-oil, and turpentine until the depressions in the surface are filled, and then allowing the oil and turpentine to evaporate, and, fourth, in coating the surface with gum-benzoin dissolved in alcohol, substantially as and for the purpose specified.

JOHN C. ORTH.

Witnesses:

CLARENCE H. COLLINGS,

E. L. THURSTON.