

UNITED STATES PATENT OFFICE.

PAUL JAEGER, OF STUTTGART, GERMANY.

LIQUID COATING COMPOSITION.

953,621.

Specification of Letters Patent.

Patented Mar. 29, 1910.

No Drawing.

Application filed February 26, 1909. Serial No. 480,284.

To all whom it may concern:

Be it known that I, PAUL JAEGER, a subject of the German Emperor, of Stuttgart, in the Kingdom of Württemberg, Germany, have invented certain new and useful Improvements in Liquid Coating Compositions, of which the following is a specification.

My invention relates to a liquid coating composition intended more especially for the finishing of wood surfaces, particularly such as are carved or irregular in contour.

The object of my invention is to provide a combined filler and stain, which will eliminate the difficulties and inconveniences heretofore encountered in the finishing of wood surfaces. Liquid stains, such as have heretofore been used, are objectionable in that they frequently roughen the surface of the wood owing to the swelling of the fibers caused by the carrier. Consequently, the surfaces treated have to be sand-papered, or otherwise smoothed, after having been coated with the stain, and then must be coated again, because the sand-papering always leaves light spots and strips, especially at the edges. Very porous woods, such as oak, have heretofore sometimes been first moistened with hot water, allowed to dry, then sand-papered and finally filled, which naturally rendered the treatment very expensive. By my invention these difficulties are overcome. The undesirable roughening of the surface is prevented by the use of my improved combined filler and stain, which consists of the usual color solution to which is added a liquid which prevents the roughening of the surface by filling or closing the pores at the same time as the surface is colored. As such liquid to be added to the color solution, pyroxylin solutions are particularly adapted, because they have the property of forming a thin, tough, adherent film, more or less colored, when they are mixed with concentrated spirit stains. Especially suitable for the purpose is a mixture of equal quantities of collodion and spirit stain, to which is added a small amount of ether, saturated at normal temperature with

some fatty substance such as tallow or rosin, or both. As a practical or operative composition, I combine two parts of any suitable spirit stain with one part of ether in which fat or tallow has been combined to saturation at normal temperature, and then add one part of a pyroxylin solution. By spirit stain in this composition is meant a stain in which a certain amount of alcohol is added to impart fluidity thereto. A stain produced in this way forms, on account of its fluidity, a penetrating, durable and waterproof colored coating, enough fat or rosin being supplied by the ether solution of the same to put the surface in good condition for further treatment, if desired, such as polishing or varnishing.

By applying a single coat of my composition, with a brush or sponge, a very fine and delicate coloring is produced, which can be subsequently added to or modified, if desired. Since, by reason of the rapid evaporation of the composition, more especially of the ether, a very thin but tough, durable surface is produced on the wood before the fibers of the same have time to swell, the surface remains perfectly smooth, and a dull finish can be produced at once, if desired, by brushing, and no sand-papering or other smoothing is required, whereby naturally great economies of time and money result.

Having thus described my invention, what I claim is:

1. A combined filler and stain for wood surfaces and the like, consisting of the mixture of collodion, a spirit stain and a solution in ether of a fat and rosin.

2. A combined filler and stain for wood surfaces and the like, consisting of the mixture of collodion, a spirit stain and a solution in ether of a fat.

In testimony whereof I have hereunto set my hand, this 10th day of February 1909 in the presence of two witnesses.

PAUL JAEGER.

Witnesses:

FR. JUNGINGER,

T. ELESZKIEWICZ.