

UNITED STATES PATENT OFFICE.

JOHN C. SCHMIDT, OF WESTFIELD, MASSACHUSETTS.

IMPROVEMENT IN COMPOUNDS FOR ENAMELING WOOD, &c.

Specification forming part of Letters Patent No. **219,657**, dated September 16, 1879; application filed April 28, 1879.

To all whom it may concern:

Be it known that I, JOHN C. SCHMIDT, of Westfield, county of Hampden, and State of Massachusetts, have invented a new and useful Compound for Enameling Wood, Metal, and other Materials without the employment of heat therefor, which compound is fully described in the following specification.

This invention relates to that class of compounds used for finishing the surfaces of wood, metal, textile fabrics, &c., to resemble enamel, and on wood or metal, or on a fabric-faced material, it furnishes an excellent substitute for expensive ivory, ebony, or hard-rubber finishes, and it is one which can be employed for finishing such materials without subjecting them to the action of heat; and it consists in a mixture of dry white lead, shellac, and alcohol, as hereinafter specified.

In seeking to discover some suitable compound with which to finish the surface of articles in imitation of ivory and other materials susceptible of taking a high polish, I found that none of which oil or turpentine were component parts could be employed advantageously with the essential element—shellac—for the presence of oil or of turpentine in the compound caused the compound, after having been applied to the surface of articles, to turn yellow, not retaining the clear white color of the lead; and a still greater objection to the use of oil or turpentine for said purpose was developed by an attempt to properly polish the material in which they were mixed, the result of such attempt being that so much heat was generated as to soften the composition to such a degree that it was liable to curl and roll up, so that it was nearly impossible to properly polish it; but by the omission of oil and turpentine from the composition, and by introducing into it an unusually heavy body of shellac, I obtained satisfactory results.

In order to produce an enamel finish, hard

and durable, on articles made of wood and on fabric-faced materials without injury thereto, it is necessary that the enameling composition be one which can be made to adhere to them and be properly finished thereon without subjecting such articles to the action of heat by baking, as japanned work is treated, or to a still more intense heat, such as is ordinarily employed in metallic enameling; and to serve the above-named purposes it is also necessary that the said enamel should, after having been so applied, be more or less elastic.

To prepare the said enameling compound, I mix shellac with alcohol in about the proportions of one pound of shellac to one quart of alcohol, the proportion of shellac being varied somewhat, according to the quality of the alcohol used. I then take dry white lead and mix with it sufficient of the above-named mixture of shellac and alcohol to make a mixture of all of such consistency that it can be easily spread upon articles with a brush, the preferred proportion of dry white lead in said composition being four pounds to one gallon of the aforesaid mixture of alcohol and shellac.

This enameling compound, prepared as herein set forth, if applied white, does not turn yellow, is water-proof, and is of such a tough, flexible nature that it does not crack.

The said composition is quite white when made with white shellac, and any desired fancy colors may be produced by the admixture therewith of suitable coloring-matters, and it admits of a high polish.

I claim—

An enameling compound consisting of dry white lead, shellac, and alcohol, prepared in about the proportions set forth.

JOHN C. SCHMIDT.

In presence of—

H. A. CHAPIN,
WM. H. CHAPIN.