

UNITED STATES PATENT OFFICE.

PATRICK O'BRIEN, OF SOUTH BEND, INDIANA.

IMPROVEMENT IN PROCESSES OF PREPARING THE SURFACE OF WOOD-WORK OF CARRIAGES.

Specification forming part of Letters Patent No. **175,621**, dated April 4, 1876; application filed February 26, 1876.

To all whom it may concern:

Be it known that I, PATRICK O'BRIEN, of South Bend, in the county of St. Joseph and State of Indiana, have invented a new and useful Process for Treating the Wood-Work of Carriages and Cabinet-Ware, which process is fully set forth in the following specification:

My invention relates to certain improvements in the process of preparing the wood-work of carriages and other vehicles and cabinet-work for the reception of what is known in the art as the final or finishing coat of paint and varnish; and my invention consists in the application to the surface of the wood of a preparation of linseed-oil and driers, heated and applied while in a heated condition, for the purpose of hardening the surface and otherwise preparing it for the reception of the final coat of paint and varnish, and avoiding the necessity of the application of a series of coats of paint, as is at present practiced in the art of finishing such work.

With these objects in view, my invention consists in treating the wood-work of carriages, cabinet-ware, &c., previous to painting the same, with a solution of oil and ordinary driers heated to any degree up to the boiling-point, (preferably the latter,) and applying the same, while in a heated condition, to the wood with a brush or sponge.

Previous to my invention it has been customary, in that class of work to which my invention has reference, to coat the surfaces with a series of coats of paint, one upon another, in order to cover up the grain and any imperfections and joints, and to produce an even and hard surface to receive the final coat of paint and varnish, and protect the wood from the action of the weather. It will be readily understood that this treatment of the wood requires a large expenditure of labor

and material, and hence increases the cost. I have discovered that ordinary linseed or paint oil, when mixed with ordinary driers and heated at any degree up to the boiling-heat, and applied while in such heated condition to the surface of the wood, thoroughly permeates the fiber of the same and successfully conceals the grain and joints, and, when dry, furnishes an even and extremely hard surface, which thoroughly protects the wood from the action of the weather, and which is especially adapted to receive the final coat of paint and varnish.

The proportions of oil and driers to be used will be readily determined by those familiar with mixing and using paints, and will be governed also by the time allotted to the work to dry, and consequently a variation of the proportions will not, in any sense, be a departure from the spirit of my invention. I have found, from experience, that the heated solution of oil and driers may have added to it any suitable pigments or coloring matter, if desired, and that it may be applied to inside wood and canvas work with success also.

What I claim as new, and desire to secure by Letters Patent, is—

The process herein described of preparing the surface of the wood-work of carriages and cabinet-work for the reception of the final coat of paint and varnish—that is to say, coating the surface with a solution of oil and driers in a heated condition, as and for the purposes set forth.

Witness my hand this 21st day of February, A. D. 1876.

PATRICK O'BRIEN.

Witnesses:

EDWARD BYERLEY,
HENRY F. COSTER.