# Anited States Patent Office.

## THOMAS HALE DAVIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CHENEY KILBURN AND JOEL HALE GATES, OF SAME PLACE.

Letters Patent No. 102,660, dated May 3, 1870.

#### IMPROVED COMPOSITION FOR AND MODE OF ORNAMENTING WOOD.

The Schedule referred to in these Letters Patent and making part of the same.

I, THOMAS HALE DAVIS, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a Composition for and Mode of Ornamenting Wood, of which the following is a specification.

Nature and Object of the Invention.

My invention consists—

First, of a composition described hereafter, to be applied to wood so as to form a permanent smooth ground, which can be ornamented by the direct application of oil-colors.

Second, in the ornamenting of wood by first preparing it with the above composition and then grain-

ing the prepared surface.

The main object of my invention is to grain wood more rapidly and at much less expense than by the usual process.

#### General Description.

I make a preparation consisting of about one pound of glue and one pound of gum tragacanth, dissolved in a gallon of water, and to this may be added about an ounce of acetic acid.

The wood to be grained is smoothed as usual, and to the smooth surface is directly applied the above composition, in which has been mixed such coloringmatter as the character of the subsequent graining

may demand.

The application of glue-size alone to wood has a tendency to so raise the fibers that the surface is not of a proper character for being ornamented by graining, but the presence of gum tragacanth neutralizes this tendency of the glue-size to raise the fibers;

hence, after a single application of the above composition to the wood, by means of an ordinary brush, a smooth colored ground is presented, and this ground I proceed to ornament by the usual process of graining with oil-colors, and to the grained surface, when dry, I apply a coat of varnish.

The whole process can be completed in twenty-four hours, whereas the ornamentation of wood by ordinary graining requires five days to complete, owing to the necessary preliminary priming and coating of the sur-

face of the wood.

It may be remarked here that the object of the acetic acid is to increase the penetrating qualities of the composition, the application of which to the wood does not result in a mere surface-coating, which can crack and peel off, for the composition penetrates the wood, and affords a permanent ground for receiving the ornamental graining.

### Claims.

1. A size for coating wood, composed of glue and gum tragacanth, dissolved in water with coloring-matter, as set forth.

2. The ornamenting of wood by preparing it with the above composition, and graining the prepared sur-

face with oil-colors, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS HALE DAVIS.

Witnesses:

HARRY SMITH, FRANK B. RICHARDS.