

# UNITED STATES PATENT OFFICE.

WILLIAM DEVINE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN SIZINGS FOR WINDOW-SHADES.

Specification forming part of Letters Patent No. 117,520, dated August 1, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM DEVINE, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented and discovered a new and improved mixture and combination for the purpose of sizing window-shades previous to the application of the paint or coloring matter and gilding; and I do hereby declare that the following is a full and exact description thereof.

The sizing heretofore used by me, and by all manufacturers of window-shades, so far as I have any knowledge, is a solution of common glue, and the defects of said sizing have been that it would not set or congeal properly at a high temperature (say above 70° Fahrenheit) nor in a damp atmosphere, in consequence of which the manufacture of window-shades had to be suspended during the hottest part of summer and when the air was damp; nor could the said shades, after sizing, be dried by artificial heat.

The nature of my invention and improvement consists in dissolving a certain quantity of powdered (or lump) alum in the solution of glue, the quantity of alum to be regulated by the quality of the glue and the thickness of the solution used on the particular kind of shade being manufactured—generally about one pound of alum to

twenty gallons of the solution of glue; which alum causes the sizing to set or congeal in any natural temperature of any portion of the United States, (say up to 140° Fahrenheit,) whether the air is dry or damp, and also allows the shades to be dried by artificial heat.

To enable others skilled in the art to make and use my invention and improvement, I will proceed to describe the mode of making it.

I first make the ordinary sizing heretofore in use by the trade, which is common glue dissolved in water; after which I add the alum, generally powdered to make it dissolve sooner; and after the alum is entirely mixed and dissolved in the solution the sizing is ready for use.

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

The introduction of alum as one of the component parts of the sizing to be applied to window-shades, which causes the sizing to set and congeal readily and properly at the highest natural temperature or in a damp atmosphere, and also when dried by artificial heat, whereby the manufacture of window-shades can be carried on at all times of the year and in all temperatures.

Witnesses: WILLIAM DEVINE.

JOHN DOLMAN,  
JAMES PENN MACLAIN.