UNITED STATES PATENT OFFICE.

N. B. POWERS, OF LANSINGBURG, NEW YORK.

IMPROVED COMPOSITION FOR SIZING FOR USE IN THE MANUFACTURE OF FLOOR-CLOTHS, &c.

Specification forming part of Letters Patent No. 36,793, dated October 28, 1862.

## To all whom it may concern:

Be it known that I, N. B. POWERS, of Lansingburg, in the county of Rensselaer and State of New York, have invented a new and Improved Sizing Compound; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention consists in the employment or use as a sizing compound of a mixture of blood and tannin, with or without linseed or other drying oils, to be applied to textile fabrics-such as canvas-used in the manufacture of floor oil cloths, or to any other textile fabric or paper. My composition is made by mixing a quantity of tannin with blood as it comes from the veins of cattle or other animals, in about the following proportions: blood, one hundred and twenty parts; tannin, one part, by weight. The tannin combines with the albuminous and fibrous substance in the blood and produces a composition which is insoluble in water. Instead of using pure tannin, any other substance or material containing tannin may be used, such as catechu, nut-gall, or sumac. If one of these materials is to be used, it is steeped in water, so as to extract the tannin contained therein, and the decoction or liquor thus ob-

tained is mixed with the blood. It is obvious that in this case the quantity of catechu or nut-gall or other material has to be changed according to the quantity of tannin contained therein; and said materials ought to be taken in such quantity that the quantity of pure tannin contained in the solution or decoction has about the proportion above specified to the quantity of blood with which it is to be mixed. This composition is applied to the canvas either by dipping the same in it, or it may be spread on it with a brush, or in any other convenient manner; and it is equally applicable to canvas, such as used in the manufacture of floor oil-cloths or textile fabrics of any other description, or to paper. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— The employment or use of a sizing compound made of the within-described ingredients, mixed together in about the proportions specified.

N. B. POWERS.

Witnesses: JOHN DAVUX, JABESH G. SCOLLAY.