

UNITED STATES PATENT OFFICE.

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IMPROVED WATER-PROOF VARNISH FOR PAPER, CLOTH, &c.

Specification forming part of Letters Patent No. 39,095, dated June 30, 1863.

To all whom it may concern:

Be it known that I, JONATHAN H. GREENE, of Christiansburg, in the county of Wapello and State of Iowa, have invented certain Improvements in Compositions for Waterproofing and Clarifying Textile Fabrics; and I do hereby declare that the following is a full, clear, and exact description thereof.

My said invention relates to that class of compositions used chiefly to render cloths and papers clear and transparent, as well as waterproof, for various purposes for which such cloth and paper are used, among the most important of which may, perhaps, be mentioned that of tracing drawings and various descriptions of designs. There are, however, other purposes to which this composition may be applied with advantage.

The said composition is composed of one part, by measure, of linseed-oil, one part, by measure, of india-rubber cement, and six parts, by measure, of benzine. This, for most purposes, constitutes probably the best mixture; but for a preparation of tracing-cloth and tracing-paper of close texture it may be advisable to use an additional proportion of benzine to avoid producing a gloss on the outside, and also to avoid filling the pores of the paper too full to retain the ink and colors which may be applied. This mixture may be applied with a brush, or by other proper machinery or device, to the surface of the cloth upon which it is intended to operate, which should then be subjected to heat not exceeding 250° Fahrenheit, and for most purposes 200° will answer very satisfactorily; and this heating should be continued till the composition has sufficiently penetrated the goods, and also become sufficiently dry that when taken out and cooled it shall not be tacky or sticky.

In addition to the preparation of tracing-cloth and tracing-paper by this means, I also prepare an article intended to take the place

of oiled paper in letter-books for copying letters by pressure. I also prepare with it a soft, transparent paper, to take the place of oiled silk in dressing wounds. In this case I apply a strong coating of the material to the paper, so as to produce a gloss. I also propose to prepare with it bank-notes by saturating them with this composition, which effectually prevents their being photographed when any colors are used in printing either side, and also gives durability to the bill, ease of manipulation in counting, and transparency, which enables a person to see at a glance the effect of the engraving upon both sides. There are various other purposes to which this composition may be applied, but which are obvious applications, which would be too tedious in number to enumerate.

The india-rubber cement spoken of is the article generally and technically known in trade by that name, and is a saturated solution of india-rubber in naphtha, camphene, or some other solvent. The linseed-oil should be boiled before being mixed with the other ingredients, though, if this is not done, it can be dried by an application of sufficiently strong heat. I suppose some other essential oil or solvent might be used instead of benzine as a member of this composition without entirely destroying the effect produced, which is due, in a great measure, to the combination of india-rubber and linseed-oil; but I prefer the use of benzine to any other solvent with which I am acquainted.

Having thus fully described my invention, I claim—

The combination of linseed-oil, india-rubber, and benzine, or some equivalent solvent, substantially as and for the purpose set forth.

JONATHAN H. GREENE.

Witnesses:

L. A. ROBERTS,

THOS. P. HOW.