

UNITED STATES PATENT OFFICE.

HENRY J. GRISWOLD, OF NORWICH, CONNECTICUT, ASSIGNOR TO HIMSELF
AND HENRY A. CLARK, OF BOSTON, MASSACHUSETTS.

IMPROVED TRANSPARENT COMPOSITION FOR TABLETS.

Specification forming part of Letters Patent No. 50,658, dated October 24, 1865.

To all whom it may concern:

Be it known that I, HENRY J. GRISWOLD, of Norwich, in the county of New London and State of Connecticut, have invented an Improved Transparent Water-Proof Composition for Tablets or other articles upon which a lead-pencil may be used, of which the following is a full, clear, and exact description.

Paper and cloth have heretofore been covered with compositions which, when dry, formed surfaces upon which a lead-pencil could be used; but all such compositions have been objectionable for the following reasons, chiefly on account of no grit being employed, in consequence of which omission a considerable pressure was required on the point of the pencil to make it mark legibly, and indentations were thereby left on the prepared surface after the lead of the pencil was washed off, or the surface was rendered smutty in attempting to remove the lead marks; and these compositions were also too soft and not sufficiently water-proof to resist the friction and moisture necessary to rub off the pencil-mark, and were frequently removed from the materials on which they were placed, thereby destroying them for farther use.

To remove the above-mentioned difficulties is the object of my invention, which consists of a water-proof composition of varnish and chemically-prepared soapstone, or an equivalent substance containing the required grit, which composition, after being thoroughly mixed and ground in a suitable mill, is applied to the surface of paper, cloth, or other suitable material, and when dry and hard forms a permanent transparent water-proof coating which may be written upon and washed without being easily worn away or indented.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In practice I have found that the proportions of the ingredients as given below produce the best result, viz: About five pounds of a substance known as "Munger's chemically-prepared soapstone" is thoroughly mixed or incorporated with about eighteen pounds of white shellac varnish, and this mixture is then ground

in a suitable mill until it attains the required degree of fineness, when, being in liquid state, it is applied by a brush to paper, pasteboard, card, cloth, or other material suited for lead-pencil use.

After being laid on smoothly with the brush, the composition dries rapidly and becomes hard, transparent, and impervious to water.

I do not wish to confine myself, however, to the exact ingredients and proportions above named, as they may be varied to some extent without departing from the spirit of my invention. For instance, dammar varnish and pulverized pumice may be used; but they do not produce so fine a surface.

Where a colored surface is required it may be produced by using paper or cloth of the desired shade; or the coloring-matter may be introduced into the composition before being laid on.

Ink-marks may also be readily removed from the surface of any material covered with my improved composition, and tracing-cloth so prepared is particularly useful to architects, engineers, and others, where frequent changes are required to be made in their work.

Any material suited to the purpose having alphabetical, writing, or drawing lessons printed thereon, with blank spaces left for copies, may be covered with my said composition, and when written over the whole surface may be washed, thus removing the copy without in the least impairing the original design printed thereon.

Cards of this description, on account of their durability and trifling cost, are invaluable for school use.

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

The within-described water-proof composition for tablets or other articles upon which a lead-pencil is used, consisting of the ingredients in the proportions substantially as specified.

H. J. GRISWOLD.

Witnesses:

P. E. TESCHEMACHER,
N. W. STEARNS.