UNITED STATES PATENT OFFICE.

KARL ENGLER, OF HOME, KANSAS.

MANUFACTURE OF WRITING-SURFACES.

SPECIFICATION forming part of Letters Patent No. 407,649, dated July 23, 1889.

Application filed March 23, 1889. Serial No. 304,552. (Specimens.)

To all whom it may concern:

Be it known that I, KARL ENGLER, of Home, in the county of Marshall and State of Kansas, have invented certain new and useful Improvements in the Manufacture of Writing-Surfaces; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in the manufacture of writing-surfaces; and the object of my invention is to provide a surface for blackboards, slates, &c., which can be written upon with a straw, tooth-pick, match, twigs from a tree, or other object, in contradistinction to surfaces heretofore produced, which require the use of a pencil.

A further object is to apply the compound to any smooth surface—such as wood, metal, paper, or cloth—and thus adapt the writing-surface to all kind of uses.

In producing my invention I take wood, metal, cloth, paper, leather, or other substances, and paint it any color desired, using the ordinary paint. When this has become thoroughly dry, I give it a coating of a preparation consisting of one part boiled linseed-oil, one part of emery, pumice-stone, or other fine gritty matter, and about one-half part spirits of turpentine.

The object upon which the writing-surface is to be formed may be given as many coats of this preparation as may be thought desirable, and which will vary according to the use to which it is to be subjected. If it is for a blackboard, a thick coating would be desirable. If applied to cloth, leather, or paper for pocket use, a single coating would be sufficient. When this has become thoroughly dried, by taking a match, tooth-pick, or other small object and using it as a pencil clear and distinct lines will be made upon the face of the surface. These lines are readily and quickly erased by the use of a sponge, damp cloth, or in the ordinary way of removing the marks from a slate.

The cloth, paper, or other flexible material that is treated with this compound does not become stiff or brittle, but is just as flexible as it was before it was coated. It will be seen that since the material treated remains flexible many advantages arise over compounds heretofore produced. The top of a desk can be readily and cheaply coated with this compound by first painting it, letting it dry, and then giving it a coat of this compound. Hence my invention is especially adapted for converting the upper surfaces of school-desks into writing-surfaces, for manufacturing small pocket-slates, or for the manufacture of blackboards, copy-books, &c., and in each and every case producing a surface which can be written upon with an ordinary stick.

Having thus described my invention, I claim—

A compound to be applied to painted objects for producing a writing-surface that can be written upon with an ordinary stick, consisting of linseed-oil, gritty matter, and spirits of turpentine, in about the proportions specified.

In testimony whereof I affix my signature in presence of two witnesses.

KARL ENGLER.

Witnesses:
A. F. PHILLIPS,
GEO. HAHN.