## United States Patent Office.

ADOLF HOEXTER, OF OFFENBACH-ON-THE-MAIN, AND GEORG SCHULTER, OF LOHR-ON-THE-MAIN, GERMANY.

## WOOD-FILLER.

SPECIFICATION forming part of Letters Patent No. 327,085, dated September 29, 1885.

Application filed December 4, 1884. (Specimens.)

To all whom it may concern:

Be it known that we, ADOLF HOEXTER, of Offenbach on the Main, and GEORG SCHULTER, of Lohr-on the Main, both in the Empire of Germany, and citizens of Germany, have jointly invented a new and useful improvement in the manufacture of surfaces of boards to be used in the manufacture of tables for schools, &c., of which the following is a specification.

The surface of the board, table, or other articles to be treated must be planed very smoothly, and are then saturated with a composition of one-third (1) of boiled linseed-oil, 15 one-third of siccative, and one-third of oil of turpentine, as long as the material will take in any of this composition. After about twelve hours, according to the state of the weather or the artificial heat employed, the 20 surface receives a varnish consisting of onethird cleaned shiver, (blue slate ground and cleaned by washing,) one-third English fillingup, (a pulverized mixture of silicate of aluminium, carbon, and manganese,) which has 25 been previously mixed with a composition of nine-tenths  $(\frac{9}{10})$  terchine, (a varnish composed of sugar of lead, copal, linseed-oil, and turpentine,) and one tenth  $(\frac{1}{10})$  varnish, diluted with nigrosine soluble in water or spirit, 30 of the required quantity to give the necessary blackness. This composition will be laid on the surface in thickness of from four to five millimeters. The prepared surface is then dried in the open air or by artificial 35 heat. This composition, while drying, hardens more and more, and becomes at last perfectly petrified.

Tables or boards for schools, usually called "blackboards," which require to have certain fixed lines on their surface, must have these lines cut into the composition before the same is completely hardened, which may be filled up with a composition of one-third mastic and two-thirds colophony, mixed with a little cinnabar, when the lines are to be red, or any other suitable coloring matter, to give the said lines the desired color.

When the surface, as well as any lines or permanent marks made in the surface, as above described, are perfectly dry and hard-50 ened, this surface is polished by means of artificial stones or any other suitable polishing-tool.

The material upon which this artificial surface is applied may be of any desired substance—such as wood, metal, pasteboard, leather, or any artificial material—and when finished either white or colored crayons or chalk or other substances may be used. This writing or marking upon the surface will not 60 efface by dry-rubbing, but is perfectly removed by the application of a wet cloth or sponge.

The advantages of this artificial surface are many. Any colored crayons, slate or lead 65 pencils can be used upon the same. The same do not cut into the surface, and prevent any unpleasant noise—such as the use of slate or lead pencils upon common slates, or of chalk upon the usual blackboard now in use.

This material or composition may likewise be used for building copes, ornaments, and similar purposes.

What we claim as our invention, and desire to secure by Letters Patent, is—

The herein-described composition, consisting of cleaned shiver, (ground and cleaned blue slate,) English filling-up, (a pulverized mixture of silicate of aluminium, carbon, and manganese,) mixed with varnish and nigrosine or 80 other suitable coloring matter in the proportions specified, and for the purpose substantially described.

In testimony that we claim this as our own we have signed hereunto our names in the presence of two subscribing witnesses.

ADOLF HOEXTER. GEORG SCHULTER.

Witnesses:

J. GRUND,

A. S. HOGUE.