## United States Patent Office,

HEINRICH REINHOLD, OF HAMBURG, GERMANY, ASSIGNOR TO HIMSELF AND CARL HEINRICH DRACKE, OF SAME PLACE.

## MANUFACTURE OF ARTIFICIAL SLATE.

SPECIFICATION forming part of Letters Patent No. 236,083, dated December 28, 1880.

Application filed October 18, 1880. (No model.) Patented in Germany April 27, 1879.

To all whom it may concern:

Be it known that I, Heinrich Reinhold, of Hamburg, in the Empire of Germany, have invented a certain new and useful Improvement in the Manufacture of Artificial Slates, of which the following is a specification.

My invention relates to the compounds which are applied to sheets of wood, or paper, or paper board, to produce slated or slate-like surfaces, from which marks may be erased with the same facility as from stone slates.

My invention consists in a novel compound for forming such slate-surfaces, and also in a slate prepared or coated with said compound,

15 as more fully hereinafter described. In preparing my compound I employ the following ingredients, in about the proportions hereinafter named: copal, two hundred (200) grams; ether, four hundred (400) grams; 20 shellac, one (1) kilogram; sandarac, one (1) kilogram; strong alcohol, four (4) liters; lampblack, one hundred and fifty (150) grams; ultramarine, fifty (50) grams; Venice turpentine, thirty (30) grams; emery, one (1) kilo-25 gram. The copal is first dissolved in the ether. I then form a solution of the shellac and sandarac in the alcohol, and mix with it the dissolved copal; after which the lamp-black, the ultramarine, the Venice turpentine, and the 30 emery are added to the mixture, and the whole is stirred until there is formed a compound of uniform consistency and homogeneous char-

In applying my compound I take boards of |

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wood or paper having smooth, unbroken surfaces, and coat their surfaces evenly with the compound by means of a brush. The coating, while still wet, is set on fire, and will burn until all the highly-inflammable material has been consumed. After this a second coating of 40 the compound is applied in a similar way with a brush, and allowed to become thoroughy dried. The surfaces are then polished by means of pumice-stone, sand-paper, or other similar material, and afterward washed off by 45 means of water. The boards treated in this manner are very durable, as the compound preserves the wood and prevents rotting.

The proportions of the various ingredients above mentioned are those which I believe to 50 best accomplish the purpose; but these proportions might be varied to some extent without departing from the spirit of the invention.

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

1. The slating compound composed of copal, ether, shellac, sandarac, alcohol, lamp-black, ultramarine, Venice turpentine, and emery, substantially as specified.

2. An artificial slate consisting of wood, 60 paper, or paper board coated with the compound herein described, substantially as specified.

## HEINRICH REINHOLD.

Witnesses:

A. SCHAPER, F. ENGEL.