217,713

UNITED STATES PATENT OFFICE.

DEMETRIUS M. STEWARD, OF CINCINNATI, OHIO; ASSIGNOR TO ANCHOR SOAP STONE COMPANY, OF SAME PLACE.

IMPROVEMENT IN ARTIFICIAL SLATE.

Specification forming part of Letters Patent No. 217.713, dated July 22, 1879; application filed May 9, 1879.

To all whom it may concern:

Be it known that I, DEMETRIUS M. STEWARD, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful compound, which I designate as "Artificial Slate," and which I propose to employ in the manufacture of slate-pencils and other articles.

The compound and the process of making and using it are fully described in the follow-

ing specification.

The compound is composed of the following substances, in about the proportions state; but the process of compounding them may be varied, although I preferably employ that which I am about to describe, as I have found that it produces very satisfactory results.

I first take about thirty (30) parts of finely-pulverized slate, fifteen (15) parts of gypsum, and thirty (30) parts of tale or talcose earth, and mix them together thoroughly in a suitable vessel while in a dry condition. After they are thoroughly incorporated I add to the mass about twenty-five (25) parts of cement or waterglass, which acts as a flux for the other ingredients, and again stir the mass until it is thoroughly mixed and in a plastic condition. While in this state the compound may be molded, drawn, or otherwise shaped into the article which it is desired to produce, and af-

terward dried in any convenient manner. As it dries it becomes hardened sufficiently for use, and the article may then be considered as complete. It may, however, be polished, glazed, or painted, to impart a more complete and ornamental finish.

In making slate-pencils I prefer to mold them under pressure, so that they shall be hard and compact when dried. This may be done in a variety of ways, the essential requisite being that the pencils shall be even and straight when completed.

Having thus described my invention, what.

I claim is—

1. A compound consisting of pulverized slate, gypsum, talc or talcose earth, and cement or water-glass, substantially as described, for the purposes specified.

2. As a new article of manufacture, a slate-pencil composed of the following ingredients, to wit: pulverized slate, gypsum, talc or talcose earth, and cement or water-glass, in substantially the proportions specified.

In testimony of which invention I have hereunto set my hand this 26th day of April, A. D. 1879.

DEMETRIUS M. STEWARD.

Witnesses:

C. W. Cole,

E. A. ELLSWORTH.