

# UNITED STATES PATENT OFFICE.

JAMES SMITH, OF MENDON, NEW YORK.

## IMPROVEMENT IN THE MANUFACTURE OF STONE PASTEBOARD.

Specification forming part of Letters Patent No. **12,531**, dated March 13, 1855.

*To all whom it may concern:*

Be it known that I, JAMES SMITH, of Mendon, in the county of Monroe and State of New York, have discovered, invented, and applied a new and useful compound for roofing for boards and for other purposes; and I hereby declare that the following is a full, clear, and exact description of the same, together with the manner of compounding and use.

I grind or pulverize a stone found in Gibsonville, Livingston county, New York, composed of silica, (flint in impalpable powder,) alumina, oxide of iron, sulphate and carbonate of lime, and sulphate of magnesia in varying proportions—some large and others minute. This stone I pulverize finely by grinding. I then mix it with paper-pulp, either in the engine or machine when said pulp is being ground, or in a vat, and water is applied until the compound becomes about the consistency of pulp prepared for making paper, but somewhat thicker or stiffer. I use about three fourths, in weight, of the pulverized stone to one-fourth of the paper-pulp. This mixture, when about the consistency of very thick pulp prepared for paper-making, I mold into sheets as brown or wrapping hand-made paper was formerly molded, and of various sizes and thickness, according to the purposes for which they are to be used, varying in thickness from the thirty-sixth of an inch to an eighth and upward, and of such size as may be most convenient. When molded I dry the sheets, and afterward saturate them with drying-oil so far as they readily absorb the same.

I sometimes apply a coating of the powdered stone mixed and compounded with oil on one

side of the sheets, in the manner ordinary paint is applied in painting houses, before or after the sheets are laid. I think it preferable to apply it after they are laid. In either case the sheets when they become dry are hard and of a solid consistency, much resembling stone. I use these sheets for roofing and boarding and for other purposes. They are substantially fire-proof and impervious to water.

Having thus fully described said compound and the mode of preparing and fitting it for use, I make my claims as follows, to wit:

I do not claim the use of bole of any kind, or chalk of any kind, or Spanish white, or glue, or paper-pulp, or linseed-oil, either separately or the whole combined; nor do I in any manner use bole, chalk, Spanish white, or glue, or a compound of which they form a part; but

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

1. Sheets for roofing, boarding, and other purposes, made or constructed in the manner described, or other equivalent manner, by combining said stone when pulverized with paper-pulp.

2. The application of and combining drying-oil with said pulverized stone and paper-pulp, combined in sheets as aforesaid, in the manner hereinbefore described, or in any other equivalent manner, so as to produce the results above specified, or others substantially the same.

JAMES SMITH.

Witnesses:

SAML. GRUBB,  
J. P. HARBAUGH.