

UNITED STATES PATENT OFFICE.

JOSEPH WOODHULL, OF MONROE COUNTY, NEW YORK.

IMPROVEMENT IN MANUFACTURING ARTIFICIAL STONE.

Specification forming part of Letters Patent No. 517, dated June 15, 1837; antedated six months.

To all whom it may concern:

Be it known that I, JOSEPH WOODHULL, of the county of Monroe and State of New York, have discovered a new and useful Improvement in the Manufacture of Artificial Stone and Adapting it to Useful Purposes; and I do hereby declare that the following is a full and exact description thereof.

The materials of which the artificial stone is manufactured and the manner of preparing them are as follows: plaster-of-paris, calcined in the same manner as when prepared for cements; lime, burned in the same way as is done in the manufacture of quicklime, and then ground to a fine powder without being slaked, or otherwise slaked and then calcined; oxide of manganese and ore of iron calcined by a full red heat, and that description of iron ore denominated by workmen "poor ore" or "whites," calcined as above. All of the above-named materials must be reduced to a fine powder, and must be calcined also.

The following proportions of the above-specified materials are to be employed: five parts of plaster-of-paris to two of lime, one of manganese, one of whites, and four of sand, all by measure. All being thoroughly mixed in the dry state, are ready for use.

Molds, when practicable, should be so constructed that the face side be either made or lined with glass, particularly when a smooth surface is sought for, or variegated marble is to be imitated.

Manner of molding artificial stone: Mix the above-described compound with water, turn a portion into the mold, then fill into the mold broken or small stone, then turn in more of the mortar and fill in stone, so continue until the mold is full. It should remain in the mold

from twenty to forty minutes. The stone may then be removed and the mold filled again.

To imitate variegated marble: Mix a portion of the compound (omitting the sand) with the color or colors, put a small quantity of water in the mold, then distribute the compound in the water, then fill in with the dry compound until the water is taken up, then fill up the mold, as above described. The result in the foregoing examples will be that a highly-polished surface will be obtained, which in time becomes very hard, and which, if saturated with drying-oil, will be impervious to water and will not be injured by frost.

Useful purposes to which the artificial stone can be applied: Stone for buildings, cornices, columns, monuments, outside finishings to buildings, cast or molded on stone or brick and wood, inside finishings to buildings, walls, partitions, fire-places, cornices, and ornaments molded. For indoor purposes the oxide of manganese and ore of iron may be left out in such cases where the colors is objected to and superior strength is not required. For all outdoor purposes it is necessary to saturate the surface with drying-oil.

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

The combining together plaster-of-paris, lime, the oxide of manganese, and that description of iron ore denominated "whites," and sand, all previously calcined, and the whole prepared and managed substantially in the manner herein set forth.

JOSEPH WOODHULL.

Witnesses:

B. K. MORSELL,
ISAAC BEERS.