

UNITED STATES PATENT OFFICE.

GEO. E. VAN DERBURGH, OF NEW YORK, N. Y.

IMPROVED ARTIFICIAL STONE.

Specification forming part of Letters Patent No. 48,746, dated July 11, 1865.

To all whom it may concern:

Be it known that I, GEORGE E. VAN DERBURGH, of the city, county, and State of New York, have invented a new and useful Improvement in Artificial Stone for Building-Blocks, Water-Pipes or Tiles; and I do hereby declare that the following is a full, clear, and exact description thereof.

Lime and sand or other silicious matter have long been used in various combinations and in all manner of relative proportions as material for building purposes in the form of an artificial stone. It has been found, however, in all existing combinations of lime and sand that the artificial stone created thereby is of a granulated texture, more or less porous, admitting moisture, and which never admits of a smooth and finished or polished surface, and that although such artificial stone may be used for building purposes it is not adapted for the formation of water-pipes, tiles, &c.

The object of my invention is to produce artificially a perfectly smooth, tough, hard stone which shall be impervious to water; and it consists in intermingling with the lime and silicious matter forming the usual basis of artificial stones sufficient pulverized sand, marble, or other equivalent analogous substance to fill all the interstices of the coarser ingredients in the composition.

I have found by experiment that two per cent. of the pulverized sand or its equivalent will be a good average proportion thereof in the com-

position of the stone, although this proportion must necessarily vary in relation to the coarseness or fineness of the other ingredients thereof.

I prefer to mix the pulverized silicious matter with the lime and sand in the first stage of the process of manufacture, but it may be added at subsequent stages in the formation of the stone. It is equally useful in the composition of all known descriptions of artificial stones, (as, for instance in the silicated artificial building-blocks which I have recently invented, and in the Foster blocks, patented some time since,) and I regard it as an improvement in all, and as such contemplate its combination with the ingredients of each for the purposes specified; and,

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

My specified improvement in the production of blocks, tubes, tiles, and other articles of artificial stone by the use of finely-pulverized sand, marble, or other equivalent analogous substance, in combination with the other materials employed in the formation of such artificial stone, for the purpose of filling the interstices between the individual particles thereof, substantially as herein set forth.

GEO. E. VAN DERBURGH.

Witnesses:

C. E. WALKER,
JNO. BROOK.