

48,745

UNITED STATES PATENT OFFICE.

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

IMPROVED SILICATED BUILDING-BLOCK.

Specification forming part of Letters Patent No. 48,745, dated July 11, 1865.

To all whom it may concern:

Be it known that I, GEORGE E. VAN DERBURGH, of New York city, in the county and State of New York, have invented a new and useful Building-Block as a Substitute for Bricks and Stones; and I do hereby declare that the following is a full, clear, and exact description thereof.

Blocks formed of powdered lime, slaked or unslaked, intimately combined with a large proportion of clean sand or other silicious matter with the slightest possible amount of moisture, and molded under heavy pressure, have been found to be a cheap and excellent substitute for brick and stone in all building purposes. These blocks, however, when first formed, are comparatively tender and friable and liable to injury by any rough handling; hence in their manufacture great care is required in moving them until they have become hardened by exposure to the air, and, again, they are not in a condition to bear weight or resist the action of the elements until they have been exposed to the air for several months.

The object of my present invention is to avoid these objections and to obtain a block which shall not only be hard and firm when it comes from the press, but also more durable in its character than the so-called "Foster block," and be ready at once for building purposes.

My new building-block is formed as follows: Good powdered lime, either slaked or unslaked, is first mixed thoroughly and intimately with clean damp sand (or other equivalent silicious substance free from earthy matter) in the proportion of about one part of lime to ten or twelve parts of sand. This mixture of lime and sand, when ready for molding, is next moistened with a liquid silicate of such strength as will promptly form a tie or bond between the particles of the mass, and being placed in suitable molds is at once submitted to powerful pressure before the composition has become set by the action of the silicate.

A block thus silicated in its formation will be, when completed, so tough and strong as to be at once ready for handling, and from the superior cohesion of its particles can be made larger than by any other process; and,

Having thus fully described my invention, I claim—

As a new article of manufacture, a silicated building-block formed substantially in the manner herein set forth.

GEO. E. VAN DERBURGH.

Witnesses:

C. E. WALKER,
JNO. A. SNOOK.