

949,924

UNITED STATES PATENT OFFICE.

JAMES W. ADAMS, OF CURTIS, NEBRASKA.

PROCESS OF MANUFACTURING CONCRETE COMPOSITIONS.

949,924.

Specification of Letters Patent. Patented Feb. 22, 1910.

No Drawing.

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To all whom it may concern:

Be it known that I, JAMES W. ADAMS, a citizen of the United States, and a resident of the village of Curtis, in the county of Frontier and State of Nebraska, (whose post-office address is Curtis, in the said county and State,) have invented certain new and useful Improvements in Processes of Manufacturing Concrete Compositions, of which the following is a full and complete specification.

My invention relates to a process of manufacturing concrete compositions, and more especially for making artificial building blocks of concrete, and has for its object the provision of a process that will render the blocks made thereby impervious to water, frost-proof, and cause said blocks to have a maximum amount of tensile strength and crushing resistance.

In carrying out my invention, I employ, in a general way, a composition of materials substantially as follows: Five or six parts of sand (clean) and one part of cement; or, if gravel or broken stone is used, in addition to the above ingredients, I use three or four parts, gravel or broken stone, two or three parts of sand (clean), and one part of cement. I mix all of the materials thoroughly and evenly in any desired manner with sufficient water to give the composition the initial set. I then tamp the composition or compress it into blocks, by any well-known form of press, until the composition is of sufficient density, then wet the same before removing from the press sufficiently to allow the moisture therein to come to and show freely on the surface. After the blocks have been treated as above stated they should be stored in a suitable building, where they will be protected from sun, rain, and wind, and allowed to remain for four or five days during which period, and as soon as all danger of washing is past they should be watered or moistened, such watering being continued at intervals, never allowing them to become entirely dry, until a permanent set has taken place. They should then be permitted to become entirely dry. The blocks should then be removed to the open air and again watered until they

shed the water, and then, finally, to get the best results, they should be permitted to dry for at least thirty days before using them for building or any other purposes.

Having described my invention, what I claim is—

1. The process of making artificial blocks, consisting in the combination of determined quantities of sand, cement, and a moistening agent, thoroughly mixing the same with the moistening agent, molding the resultant mass into blocks under pressure, moistening said blocks before removing them from the press sufficiently to permit the moisture therein to come to the surface, removing said blocks from the press and storing them in a drying chamber where they will be protected from the sun, rain, and wind, moistening said blocks until a permanent set has taken place, drying said blocks, removing said blocks from the drying chamber and again moistening them until they shed water and finally allowing them to dry thoroughly, substantially as specified.

2. The process of making artificial blocks, consisting of the combination of determined quantities of sand, cement, gravel or broken stone, and a moistening agent, thoroughly mixing the same with the moistening agent, molding the resultant mass into blocks under pressure, moistening said blocks before removing them from the press sufficiently to permit the moisture therein to come to the surface, removing said blocks from the press and storing them in a drying chamber where they will be protected from the sun, rain, and wind, moistening said blocks until a permanent set has taken place, drying said blocks, removing said blocks from the drying chamber and again moistening them until they shed water and finally allowing them to dry thoroughly, substantially as specified.

In witness whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES W. ADAMS.

Witnesses:

PEARL M. SEELEY,
ILA M. BUNNELL.2/307/185
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