

UNITED STATES PATENT OFFICE.

SAMUEL GOODWIN, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MODE OF HARDENING MANUFACTURES OF CEMENT AND RENDERING THEM IMPERVIOUS TO MOISTURE.

Specification forming part of Letters Patent No. 2,048, dated April 16, 1841.

To all whom it may concern:

Be it known that I, SAMUEL GOODWIN, an alien from Great Britain, am now and have been a resident of the city and State of New York for the last six years, and have made oath of my intention to become a citizen thereof, have discovered a new and improved mode of making any articles that can be cast or molded perfectly durable, of which the following is a specification.

The nature of my invention consists in making any article that can be cast or molded perfectly impervious to air, moisture, or decay by saturating it in a heated composition of oil and rosin.

To enable others skilled in the art to make and use my invention, I will proceed to describe the operation. I take sand, or any pulverized gritty or stony substance, and add thereto a sufficient quantity of plaster-of-paris, or any article of the plaster or lime kind that will make the sand hold together, or pliable when mixed with water. I then cast or run it in a mold of any known shape or form. After the water has perfectly evaporated from the cast it is then saturated with a heated composition of oil and rosin mixed and applied as follows: To every barrel of rosin add three gallons of common lamp-oil. Melt the oil and rosin together in a boiler of sufficient size to receive the article intended to be prepared. Then having placed the article on a frame secured by rope or wire, lower it into the boiling mixture until it be perfectly

immersed therein, taking care that it does not come in contact with the boiler, and boil the same until it is saturated quite through, which will require three hours for an article one inch thick. It is then carefully taken out of the composition, and after a short exposure to the air becomes a solid hard substance equal to stone.

The advantage attending the boiling process is, the composition, being thoroughly driven into the cast by the heat required, takes the place of the water that has evaporated and prevents the disintegration of the cast, whereas casts hardened by oil in the cold state require a long time to become saturated, and though they become hard and impervious to moisture are not so to decay, for by being placed in a damp place they will become both moldy and rotten, and have not that hardness and durability that is acquired by my process.

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

The mode of rendering articles manufactured from cement, compounded of the materials above specified, or any others substantially the same in their composition, impervious to air, moisture, or decay by boiling them in a mixture of oil and rosin, as above described.

SAML. GOODWIN.

Witnesses:

HUGH MARTIN,
JAS. W. STOVER.