

UNITED STATES PATENT OFFICE.

J. CLARKE AND D. FRENCH, OF SYRACUSE, NEW YORK.

IMPROVED COMPOSITION FOR PAVEMENTS, ROOFING, AND OTHER PURPOSES.

Specification forming part of Letters Patent No. 34,404, dated February 18, 1862.

To all whom it may concern:

Be it known that we, JOSEPH CLARKE and DAVID FRENCH, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful composition for pavements, walks, cellar-bottoms, cisterns, roofs, and other analogous purposes, which has not been known or used before; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention consists in a new cement composition, such as hereinafter fully described.

To enable those skilled in the art to make and use our invention, we will proceed to describe the same.

We take broken stone, coarse gravel, coarse sand, coal-ashes, coal-tar, pulverized rosin, quicklime, hydraulic cement, (or water-lime,) with leach-ashes, and mix well together in about the following proportions: broken stone, five parts; gravel, six parts; coarse sand, four parts; coal-ashes, two parts; coal-tar, two parts; pulverized rosin, one part; quicklime, one part; hydraulic cement, three parts; leach-ashes, one part. After this composition has been thoroughly amalgamated and worked into a perfectly plastic state it is ready for use, and may be applied to the lining of cisterns, roofing, &c. This mixture, when dry, forms a composition which is exceedingly hard and impervious to water or dampness, while at the same

time it is to some degree elastic, and is not liable to be affected by frost or changes of temperature when exposed to the weather.

Our new composition is admirably adapted to forming cisterns, cellar-bottoms, gutters, and such like, since, while it is hard and durable and impervious to dampness or moisture, it also resists the action which frost has on all compositions used previous to our invention.

Our new composition is admirably adapted to forming sidewalks or pavements. Being laid in a green state, it is formed and fashioned to suit the will, when it dries and becomes set, and constitutes a permanent surface unaffected by exposure or frost.

It will be understood that the proportions of the ingredients may be varied without departing from our invention.

Having described our new composition, what we claim as our invention, and desire to secure by Letters Patent, is—

The within-described composition, substantially as and for the purposes set forth.

In testimony whereof we have hereunto set our hands and affixed our seals this 15th day of November, 1861.

JOSEPH CLARKE. [L. S.]

DAVID FRENCH. [L. S.]

Witnesses:

J. HUNT,

A. B. CALDWELL.