

# UNITED STATES PATENT OFFICE.

EDWIN JACQUES, OF GREAT FALLS, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND RAPHAEL GOTIER, OF SAME PLACE.

## IMPROVEMENT IN CONCRETE-PAVEMENT COMPOUNDS.

Specification forming part of Letters Patent No. **193,409**, dated July 24, 1877; application filed June 11, 1877.

*To all whom it may concern:*

Be it known that I, EDWIN JACQUES, of Great Falls, in the county of Strafford and State of New Hampshire, have invented a new and Improved Concrete-Pavement Compound, of which the following is a specification.

The object of my invention is to construct street-pavements, sidewalks, and basement-floors of a compound or concrete which will not be liable to crack, nor be injuriously affected by frost or extremes of temperature, and which will be cheap, and require only ordinary skill to lay it down.

Formula: For about twenty-seven square yards of pavement I use the following ingredients, mixed together in about the same proportions named: One barrel of gas-tar, twenty pounds of "gum" tar, one pound of alum, one pound of washing-soda, one quarter of a pound of brown potash, nineteen ordinary-sized wheelbarrow-loads of sharp sand.

The gas-tar is boiled with the gum tar about one hour and a half. I then add the potash, alum, and soda, dissolved in about

one gill of water. The sand is then added by making alternate layers of it with the first-named ingredients. The concrete is then run through a machine suitably adapted to the purpose, which thoroughly mixes the ingredients. The bed or ballast for the pavement is composed of small stones, properly tamped down, and then the hot concrete is spread on the gravel to the thickness of about three inches, and rolled down solid. To gutters I add a finishing coating of boiled tar.

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

A paving-concrete composed of the several ingredients named, mixed together in the manner and in about the proportions specified.

his  
EDWIN × JACQUES.  
mark.

Witnesses:

GEO. WM. BURLLEIGH,  
LYCURGUS PITMAN.