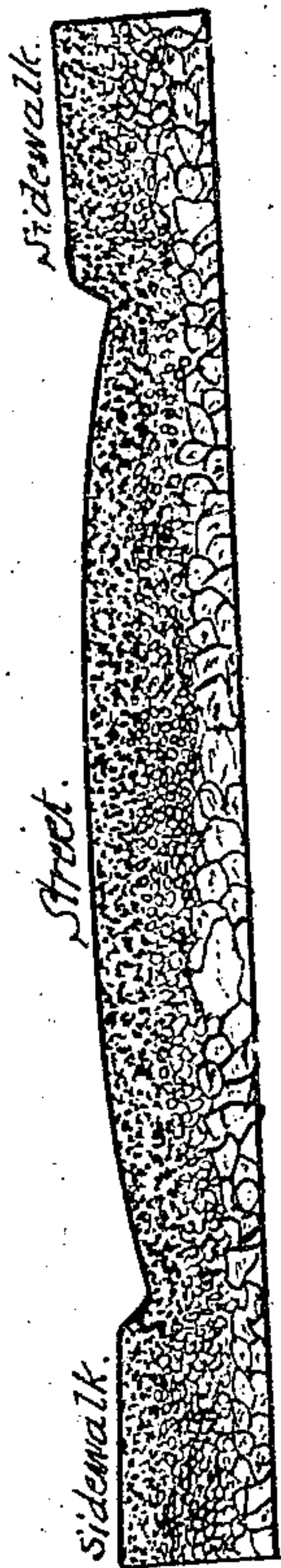


T. Smith.

Concrete Pavement.

Nº 87,007.

Patented Feb. 16, 1869.



Attest:

R. Ruppert

B. P. Clausen

T. Smith

Inventor:

D. P. Holloway & Co

Atty.

UNITED STATES PATENT OFFICE.

THORNTON SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN CONCRETE PAVEMENTS.

Specification forming part of Letters Patent No. 87,007, dated February 16, 1869.

To all whom it may concern:

Be it known that I, THORNTON SMITH, of Washington, in the county of Washington and District of Columbia, have invented a new and useful Improvement in Pavements for Streets, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings.

My improvement relates to that class of pavements for streets, alleys, floors, &c., which are made of concrete composition; and it consists in a new combination of materials by which the construction of such pavements is cheapened materially; and also in making the pavements of streets, sidewalks, and gutters in one continuous piece, without the intervention of curb-stones.

The following description will enable persons skilled in the art to compound and construct such pavements.

The concrete is formed from the following ingredients, in the following proportions: Eighty parts of coarse gravel; five parts of sharp sand; five parts of pine-tar; five parts of gas-tar; two parts of coal-ashes; two parts of cinders; one part of hydraulic cement. The above ingredients are combined in the proportions stated, or in substantially such proportions, and, when mixed into a mortar, they are spread upon the surface of the ground to be paved, which should first be properly prepared to receive the pavement, to a proper depth, according to the character of wear to which it is to be subjected, and then rolled with a heavy roller until the concrete-bed is made solid and smooth.

This pavement is cheap of construction, and,

while possessing great solidity, it is also sufficiently elastic. It is impenetrable by water, is not subject to decay, is not affected by either cold or heat within ordinary climatic ranges, and has no disagreeable odor of bitumen even in the hottest days of summer.

I am aware that other concrete pavements have been compounded, or proposed to be compounded, containing some or all of the above ingredients, and I do not claim that any of them are new; but I am not aware that any pavement has been made of these ingredients alone. Where prepared to be used it has been always in different proportions and in combination with other ingredients, which, while adding considerably to the cost, are not necessary to the proper composition of the concrete.

I propose, also, to make the sidewalks, gutters, and street of one continuous sheet of concrete, without the intervention of curbstones, as shown in the drawing.

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

1. Concrete, compounded of the above-named ingredients, and used in the construction of pavements, substantially in the manner set forth.

2. In making the sidewalks, gutters, and streets of one continuous mass of concrete, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THORNTON SMITH.

Witnesses:

D. P. HOLLOWAY,
A. MOORE.