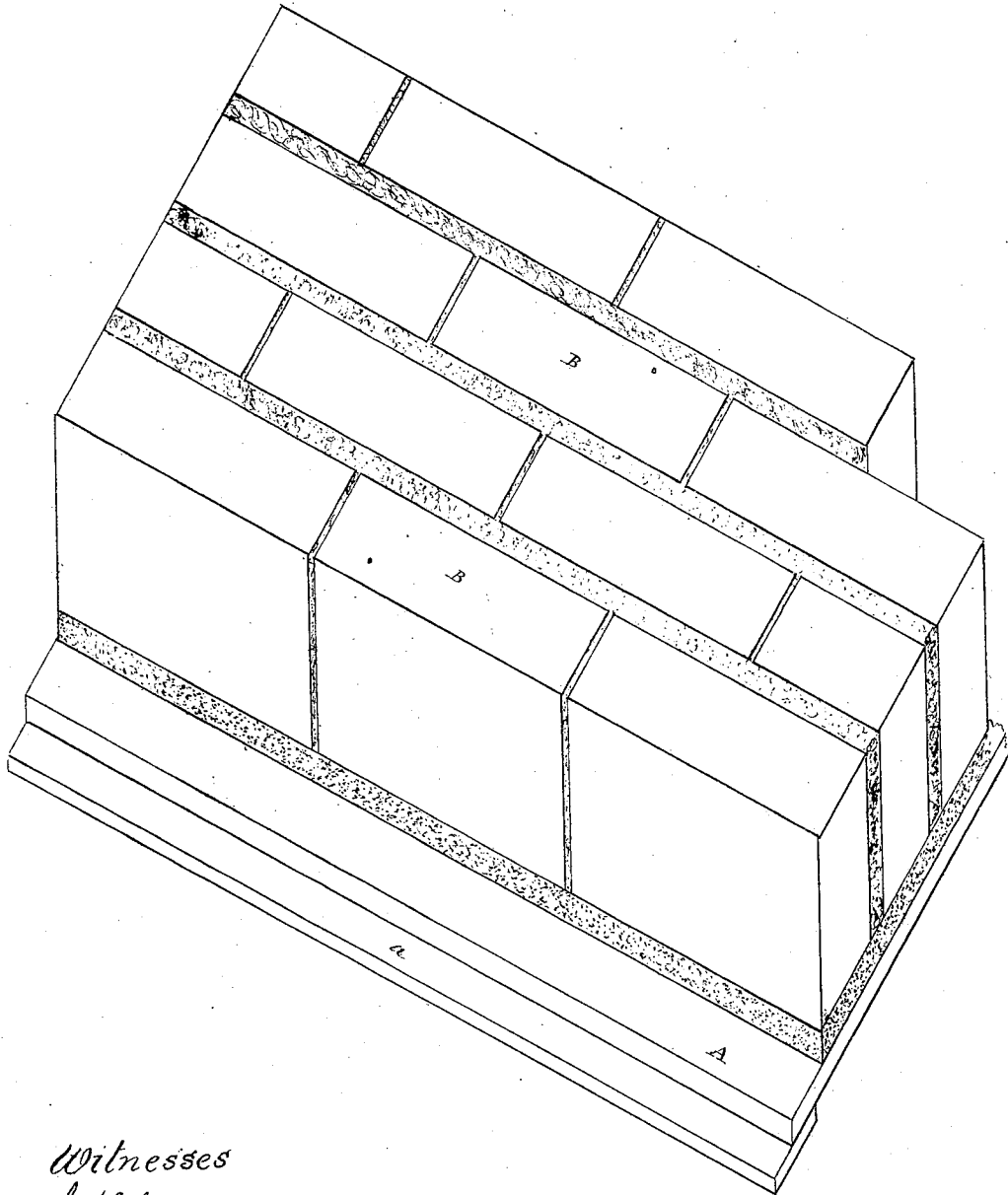


*C. G. Waterbury,*

*Stone Pavement.*

*No. 102629.*

*Patented May 3, 1870.*



*Witnesses*  
*W. L. Coombs.*  
*J. J. Coombs.*

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# United States Patent Office.

CHARLES G. WATERBURY, OF NEW YORK, N. Y.

Letters Patent No. 102,629, dated May 3, 1870.

## IMPROVEMENT IN STONE PAVEMENT.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, CHARLES G. WATERBURY, of the city of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Stone Pavements; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The accompanying drawing represents a section of pavement made pursuant to my invention, with the foundation on which it is laid.

The earth of a roadway upon which my improved stone pavement is to be laid must first be suitably graded and rolled, or treated in any of the usual methods, in order to prepare it for the reception of the pavement. It is then brought to such crown as may be desired and made smooth. I then cover the surface of the roadway or bed with a flooring of common boards or plank, laid lengthwise with the line of the street or roadway, which flooring may also be covered with tar on one or both sides, or treated in any known manner to prevent rot or decay.

A, in the drawing, represents the flooring, the ends resting on transverse sleepers, *a*, which sleepers may consist of strips of plank similar to those used in the flooring.

I place upon this flooring foundation about an inch of clean, sharp sand, or a mixture of tar and gravel, for the purpose of bedding the stone blocks, so that they may be brought to a uniform height, and form a proper surface for the pavement.

The stone blocks B are placed on their edges upon said foundation, and so imbedded in the sand as to present an even surface on top.

When the stone blocks are dressed on all sides to a regular form, say about three inches in thickness, about five or six inches in depth, and from five to fifteen inches in length, they are set in rows across the street or roadway, and narrow spaces are left between the rows to be filled with tar and gravel, or some other suitable cement. But, when not so dressed, the irregularities of form will be such that, when set as close together as practicable, there will be sufficient interstices between them to receive the cement. If the stone blocks are quite irregular as to their height or

depth, a deeper bed of sand will be required to bring them to an even upper surface.

When the stone pavement is thus laid down, I fill the crevices or interstices between the stone blocks with sharp gravel, sufficiently warm not to chill the tar subsequently to be applied. Then warm mineral or vegetable tar is to be poured over the gravel, so that it will penetrate the crevices and fill all the open spaces in the gravel between the stone blocks, cementing the gravel and the stone blocks together, and causing the mass of stone and gravel to adhere firmly together.

Instead of the warm gravel and tar any other suitable cementing material may be employed, such as grouting with cement. I prefer, however, common coal-tar or pitch. The coal-tar, in all cases, is to be boiled down and so thickened with pitch as to be tough and fibrous, and not brittle, even in cold weather. As rapidly as the same is completed the whole surface of the pavement is to be covered with sand or fine gravel, about three-fourths of an inch thick.

I have found by experience that in a stone pavement, laid as above described, on a board foundation, stone of about one-half the depth of those found necessary in a pavement laid on an earth foundation in the usual way will keep even on the surface, and make as durable a pavement, with as little liability to get out of repair, as if stone of twice the depth were used on the ordinary earth foundation. The board foundation prevents the stone paving-blocks from tilting or canting, or sinking at one end or one corner, and thus obviates a serious defect in stone pavements as heretofore laid.

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

A pavement, composed of stone blocks laid upon a board foundation, with a bedding of sand or cement between the stone and said board foundation, and having the interstices between the stone blocks filled with gravel and tar, or other suitable cement, substantially as described.

C. G. WATERBURY.

Witnesses:

J. J. COOMBS,  
JOS. L. COOMBS.