## L. S. FILBERT & L. M. HOFFMAN.

\* Pavement.

No. 160,174.

Patented Feb. 23, 1875.

Hig 1

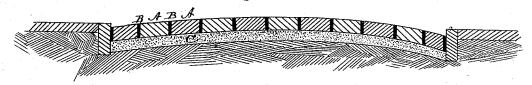
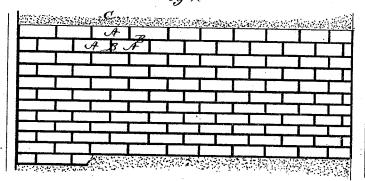
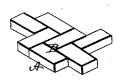


Fig 2





WITNESSES Franck L. Ourand, C. L. Evert INVENTOR

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L. Sn. Hoffwere

Attorneys

## UNITED STATES PATENT OFFICE.

LEWIS S. FILBERT, OF PHILADELPHIA, PENNSYLVANIA, AND LINDLEY M. HOFFMAN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. 160,174, dated February 23, 1875; application filed February 6, 1875.

To all whom it may concern:

Be it known that we, LEWIS S. FILBERT, of Philadelphia, Pennsylvania, and LINDLEY M. HOFFMAN, of Washington, District of Columbia, have invented certain new and useful Improvements in Pavement for Streets; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature and object of our invention are to form a permanent and durable pavement by combining rectangular stone or granite blocks, such as are known as Belgian blocks, laid on a broken stone, gravel, sand, or vulcanite foundation, either laid direct across the street or diagonally, and filled with a vulcanite composition, which causes said blocks to firmly adhere together, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section, and Fig. 2 a plan view, of our pavement.

A A represent rectangular stone or granite blocks, such as are known as the Belgian blocks, which may be laid direct across the street, or diagonally, or in any other suitable manner upon a foundation, C, of broken stone, gravel, sand, or vulcanite. The blocks are laid in such a manner as to form suitable spaces between them, and these spaces are filled with a vulcanite composition, B, namely, the composition of coal-tar with sulphur or

sulphuric acid, usually known among pavement-makers by that designation. This vulcanite composition is of such an adhesive nature that when properly filled in between the blocks it is extremely difficult to disengage the blocks from each other. We have found by experiments that in attempting to separate the blocks the stone will break before the vulcanite will give. It makes the pavement water-proof, comparatively noiseless, and prevents frost from penetrating, which displaces the blocks in the spring of the year, making an uneven road.

We are aware that pavements have been laid of blocks of stone with concrete filling in the interstices, and we do therefore not claim such as being our invention.

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

1. The combination, in a pavement, of a series of stone or granite blocks laid to form spaces between them, and a vulcanite composition filling said spaces, substantially as herein set forth.

2. The combination of the base or foundation C, blocks A A, and vulcanite filling B, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 29th day of January, 1875.

L. S. FILBERT. LINDLEY M. HOFFMAN.

Witnesses:

C. M. ALEXANDER,

J. M. MASON.