

J. MURPHY.
Concrete Pavement.

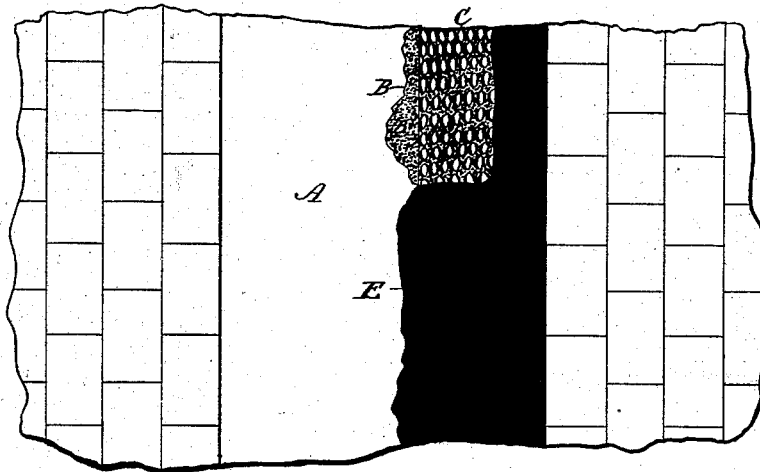
No. 219,501.

Patented Sept. 9, 1879.

Fig. 1.



Fig. 2.



WITNESSES:

W. W. Hollingsworth
Edw. W. Byrne

INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

JOHN MURPHY, OF COLUMBUS, OHIO.

IMPROVEMENT IN CONCRETE PAVEMENTS.

Specification forming part of Letters Patent No. **219,501**, dated September 9, 1879; application filed July 28, 1879.

To all whom it may concern:

Be it known that I, JOHN MURPHY, of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Concrete Pavement; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section across the roadway. Fig. 2 is a plan view, showing different strata of materials.

My invention relates to an improved pavement having a base of cobble-stone; and it consists in combining with the cobble-stone a mastic for filling up the interstices and giving a smooth upper surface, composed of pulverized iron slag, pulverized stone, dried sand, oxide of iron, lime, and pitch or asphaltum and coal-tar.

In the drawings, A represents the road-bed, which is first graded, rolled, and covered with a layer of sand, B. Upon this bed of sand the cobble-stones C are then packed with their longitudinal axes in vertical position. For filling in the interstices between the cobble-stones, and giving a smooth and uniform surface, I then place upon the cobble-stones a mastic, E, which is forced between the stones

and rendered smooth upon its upper surface by means of heavy rollers.

The composition of this mastic constitutes the prominent feature of my invention, and is as follows: twenty-five per cent. of pulverized iron slag; twenty per cent. of pulverized stone; ten per cent. of dried sand; eight per cent. of pulverized oxide of iron; seven per cent. of pulverized lime or lime stone; thirty per cent. of pitch or asphaltum.

I am aware that most of these ingredients have been used before in paving-compositions, and I therefore only claim the same when used together to form a paving-composition which possesses great enduring properties, and one specially adapted to be used in connection with a cobble-stone base.

What I claim is—

A pavement consisting of a base of cobble-stone and a mastic for a top-dressing compound of pulverized iron slag, pulverized stone, dried sand, oxide of iron, lime or its equivalent, and pitch or asphaltum, combined in or about the proportions indicated, for the purpose described.

JOHN MURPHY.

Witnesses:

I. D. SULLIVAN,
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