J. R. Cushier,

Wood Pavement.

No. 88,455. Patented Mar: 30. 1869.

Fig: 1.

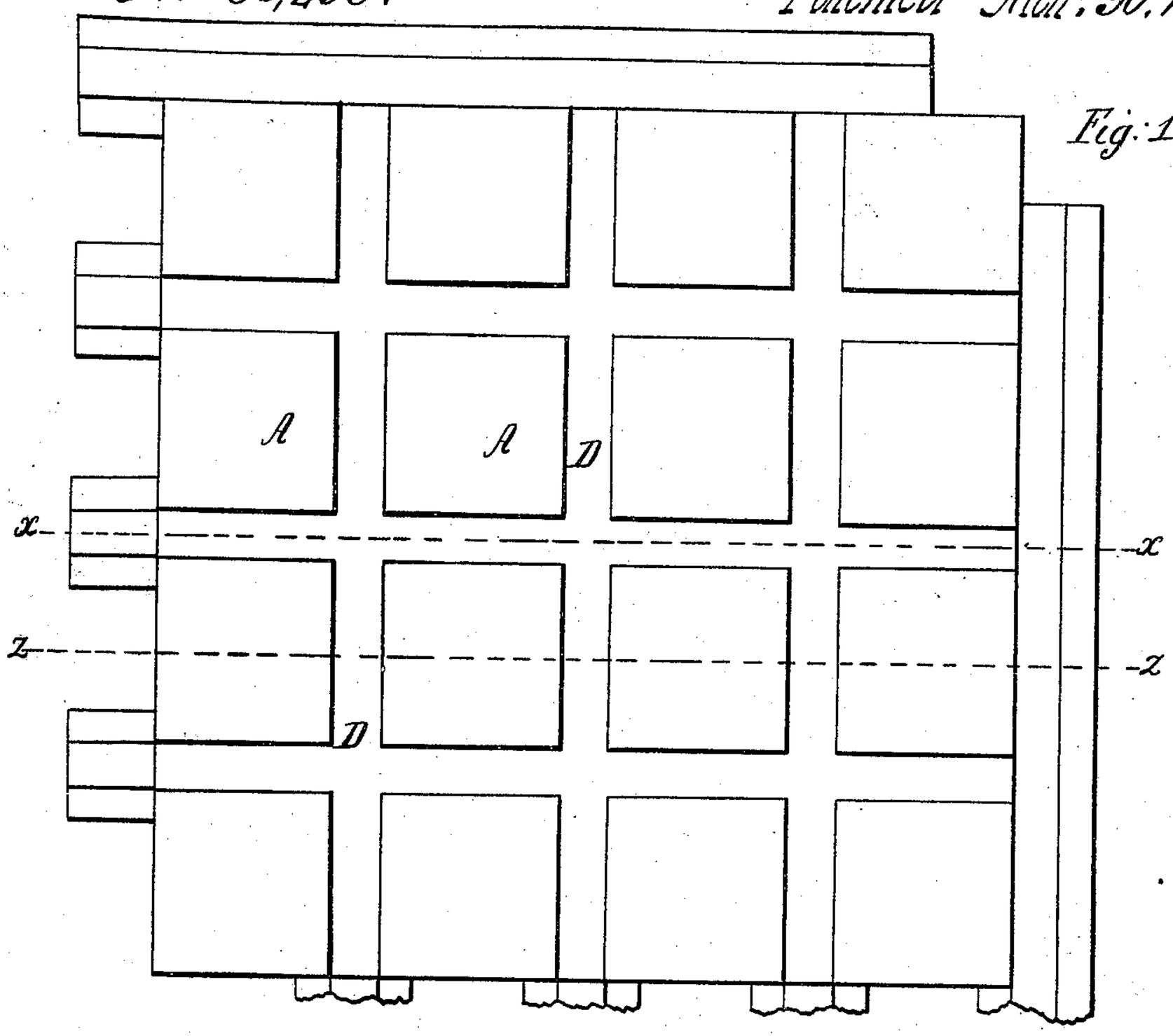


Fig: 2.

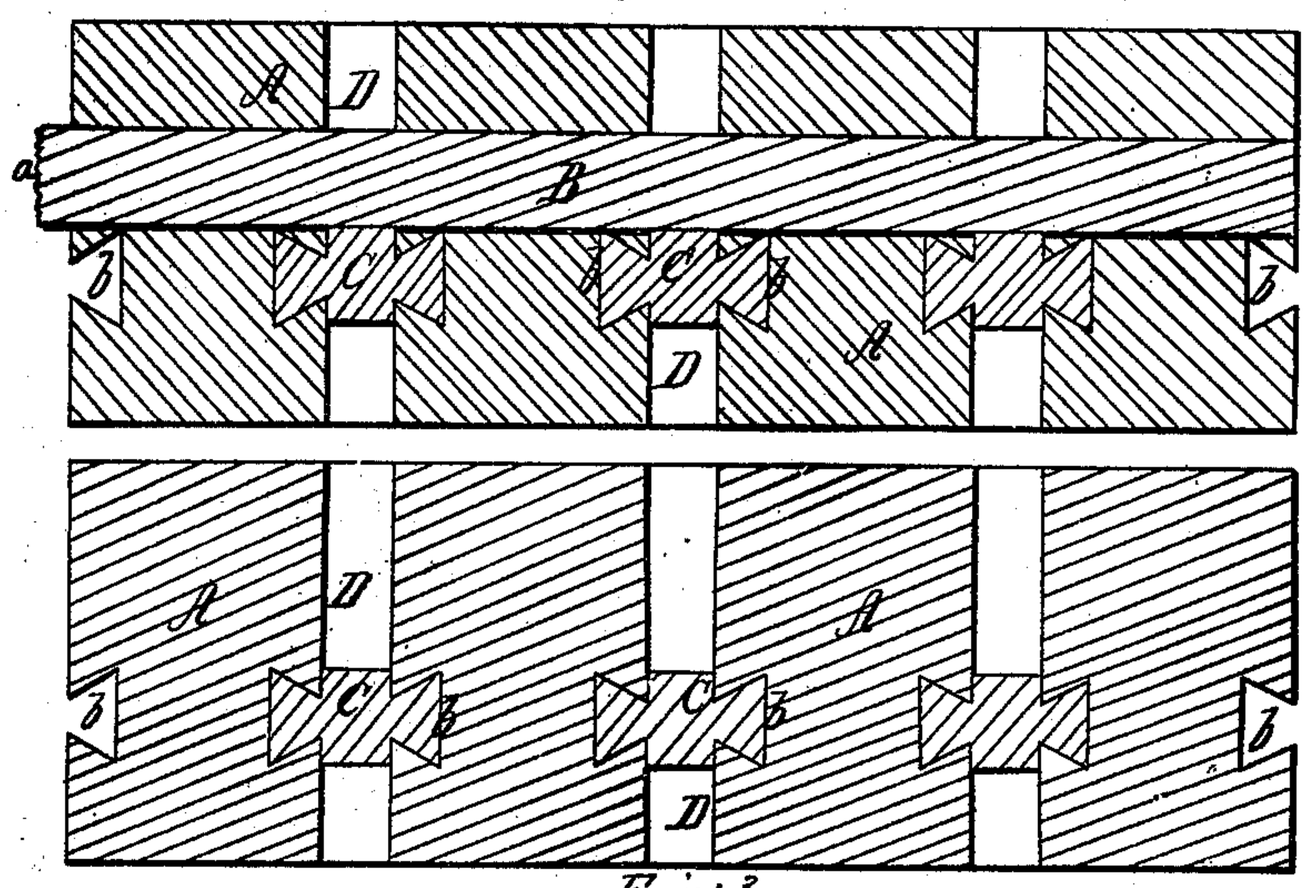
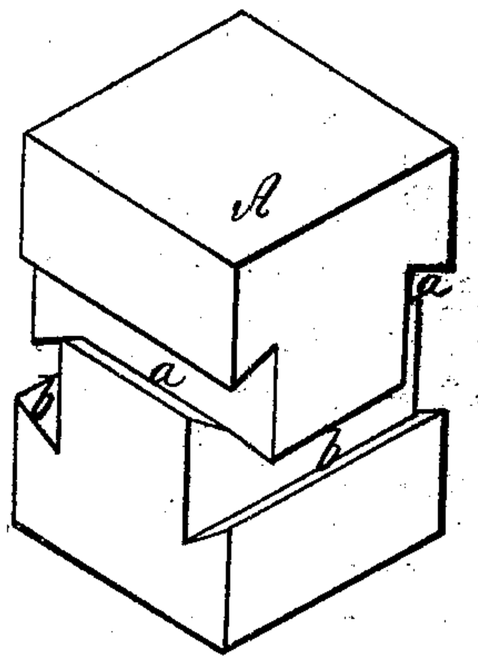


Fig: 3.

Fig: 4.



Witnesses;
F. M. Coombs
Fred: Haynes

Inventor;
John R. Cushier

United States Patent Office.

JOHN R. CUSHIER, OF NEW YORK, N. Y.

Letters Patent No. 88,455, *dated March* 30, 1869.

IMPROVED WOODEN 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, JOHN R. CUSHIER, of the city, county, and State of New York, have invented a new and useful Improvement in Pavements, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a plan of a section of my improved pavement, ready for laying down;

Figure 2, a vertical section of the same, taken as indicated by the line *x x* in fig. 1; and

Figure 3, a similar section, taken as denoted by the line *z z*.

Figure 4 is an isometrical perspective view of one of the blocks, which make up each section of the pavement.

Similar letters of reference indicate corresponding parts.

My improvement relates to wooden pavements made up, for the most part, of wooden blocks, arranged to present an end grain, or surface to the foothold, and put together in sections, composed of a number of such blocks connected, or tied together.

My invention consists in a combination of rectangularly-shaped blocks, having dovetail-shaped grooves in their several sides, and intersecting or transversely-disposed locking-strips, of double-dovetail form, in such manner as, that while the several blocks, in a section, lie separate, or detached, the one from the other, the whole are firmly united together in every direction, both horizontally and as regards vertical depression, and the locking-strips made to form a bearing-surface for cement introduced between the blocks, and to prevent the same from escaping or running through the section.

Referring to the accompanying drawing, A A represent wooden blocks, of rectangular form, arranged so as to present their end grain, or surface, to form a foothold, and made with dovetailed-shaped grooves *a b*, in their several sides, the one set of grooves, *a*, which are arranged on or in two opposite sides of each block, being disposed above the other grooves, *b*, cut in the other two sides of the block.

In or through these grooves *a b*, of a sufficient number of blocks to compose a section, are introduced, or driven locking-strips B C, of a double-dovetailed shape in their transverse section, the one set of strips, B, fitting within or through the dovetail grooves *a*, and serving to support vertically, and to tie horizontally, in the one direction, said blocks, while the other set of locking-strips, C, is made to fit within or through the other dovetail grooves, *b*, to further aid in the vertical support of the blocks, and to tie, or connect them horizontally, in a direction at right angles to the horizontal lock secured by the first strips B.

It is preferred to so arrange these cross-locking strips, and the grooves which they fit, as that the one set of strips serves to support the other set, and so that the section of blocks is available, either side or face uppermost; likewise to make the strips project, at their ends, beyond the section, for the purpose of interlocking a series of sections together, in forming or laying down the pavement.

Although the several blocks in a section are, by the arrangement of the two sets of locking-strips, firmly united, and the section has a rigid character given to it, the blocks themselves lie separate, or distinct from each other.

I therefore fill up the spaces between the blocks with cement, D, composed of any suitable material or materials, which not only serves to give solidity to the section, but, without any special grooving of the blocks, to improve the foothold on the surface for horses, and to prevent water from working its way between and below the blocks, to rot the latter.

By the arrangement of the locking-strips B C, it will be observed that, in putting in the cement, the same is restrained from running through or escaping from between the blocks in a vertical direction, by the locking-strips, which thus form bearing-surfaces for the cement, on both sides or faces of the section, and effectually interrupt or close communication down between the separated blocks. Each section thus constructed and filled in with cement should be made of convenient size to handle, to facilitate the laying down and taking up of the pavement, as occasion may require.

A pavement made as herein described, will be found very durable, is easily and cheaply got up, needs no sub-sills, or foundation-planks to rest upon, and involves no waste of lumber or material. The same, too, presents a good foothold and desirable running-surface for vehicles, is easily and quickly put together, there being, of necessity, no bolts or screws, and admits of a speedy removal of the blocks in a section, or of a single section from an adjacent one, when necessary for repair, and, in laying down gas-pipes, or doing any underground work, renders unnecessary the tearing up of a large portion of the pavement.

What is here claimed, and desired to be secured by Letters Patent, is—

The double-dovetailed strips B C, formed with a rectangular central portion longitudinally, in combination with the blocks A, having dovetailed grooves *a b* on their sides, so arranged that said central portions of the strips B C are made to cross each other, holding the blocks a given distance apart, and forming bearings for cement, to fill the spaces between said blocks, substantially as shown and described.

JOHN R. CUSHIER.

Witnesses:

HENRY T. BROWN,

J. W. COOMBS.