

E. Shaw,
Wood Pavement.

No. 112,503.

Patented Mar. 7. 1871.

fig. 1.

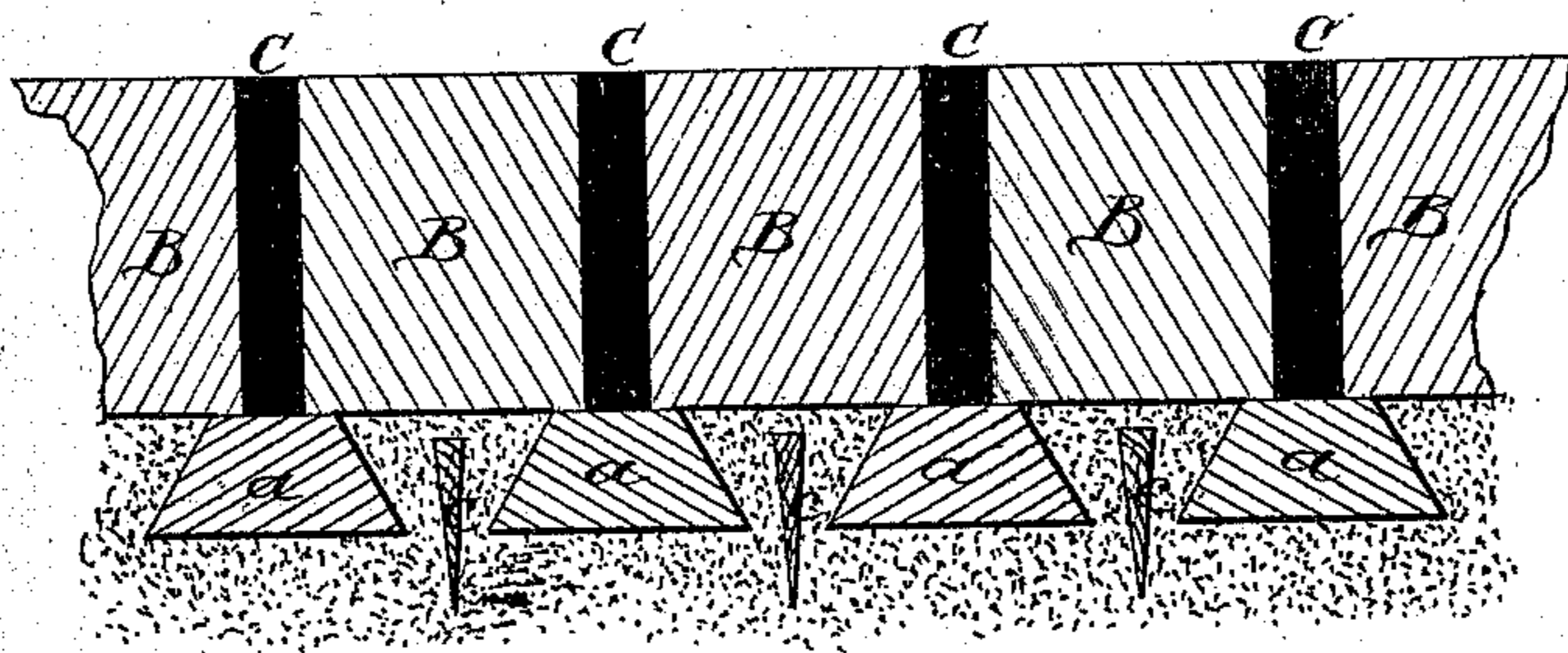
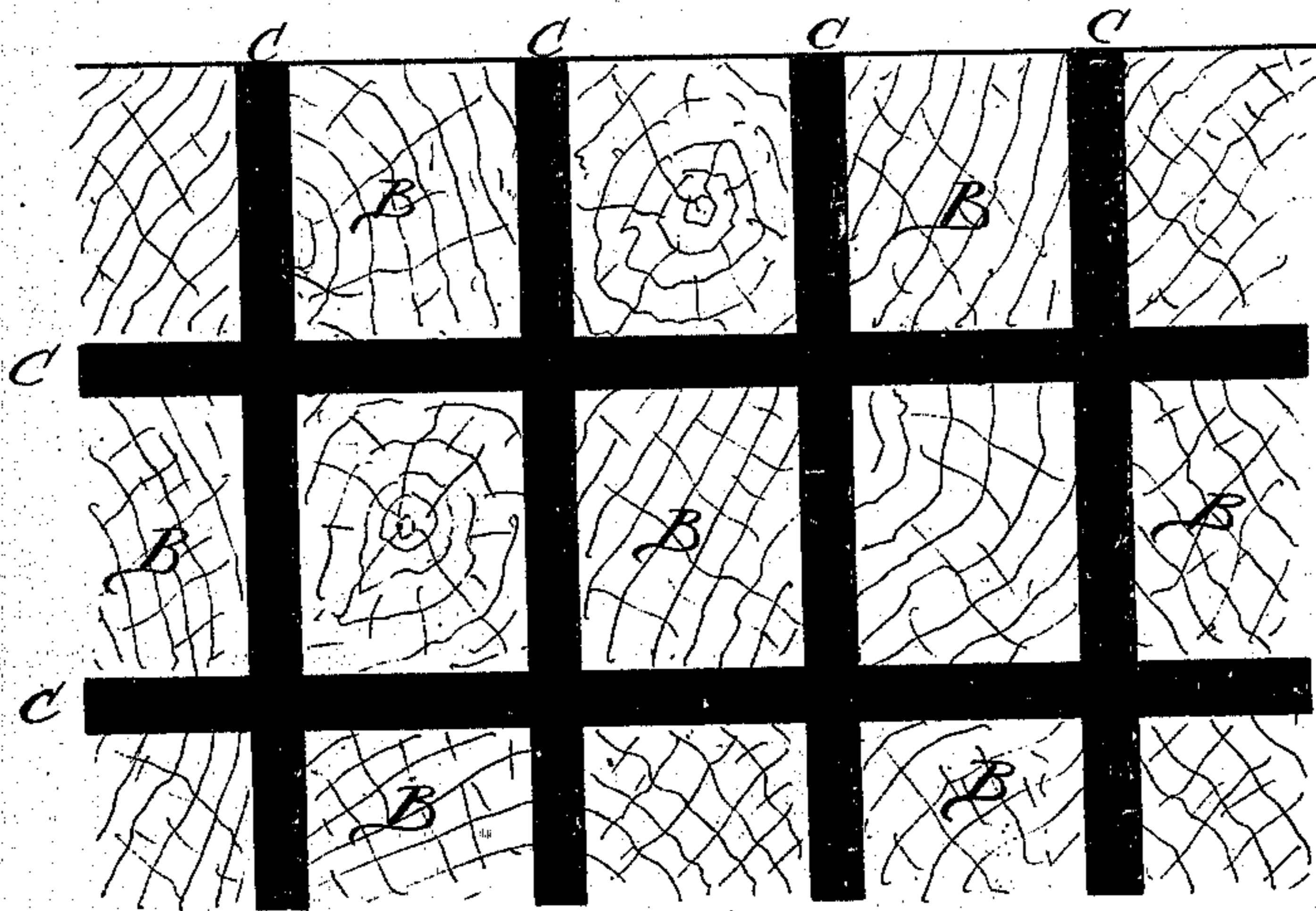


fig. 2.



Witnesses:

Victor Haymann
John S. Fowler

Inventor:

Eaton Shaw
By Hill & Ellsworth,
Attys.

UNITED STATES PATENT OFFICE.

EATON SHAW, OF PORTLAND, MAINE.

IMPROVEMENT IN WOODEN PAVEMENTS.

Specification forming part of Letters Patent No. **112,503**, datd March 7, 1871.

To all whom it may concern:

Be it known that I, EATON SHAW, of the city of Portland, in the county of Cumberland and State of Maine, have invented certain Improvements in Wooden-Pavements; and I declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical section, and Fig. 2 a plan.

Similar letters of reference indicate like parts.

The object of this invention is to construct a simple cheap wooden pavement, in which the blocks shall not be liable to displacement from expansion by the absorption of water, nor from the yielding of the foundation beneath them.

To this end it consists in combining a series of blocks, isolated from each other by some elastic substance, with truncated wedge-shaped sills, and with boards set edgewise in the sand between the sills, and directly under the center of each paving-block, as hereinafter described.

In the drawings, B B represent wooden blocks, square or oblong, arranged so as to leave a space, C, entirely around each one, isolating it from all its fellows. This space is filled in with any elastic composition suitable for the purpose which will yield to the expansion of the blocks, and again resume its original condition when the pressure resulting from such expansion is removed. Many of the compounds of tar, sand, &c., such as are now used in the grooves running transversely to the street, will answer the purpose; and I propose to use them or any other filling that sets hard enough to resist the wear, and yet is sufficiently elastic for my purpose, my object being simply to prevent the blocks in the transverse rows from pushing each other up out of place when swollen by moisture from the air or the ground.

The blocks thus constructed and arranged I set with their edges resting upon sleepers A A, buried in the sand and arranged longitudinally of the road-bed, each sleeper having the form of a truncated wedge lying upon its broadest side, with its narrowest side uppermost.

The lower edges of the sleepers may closely approach each other, if preferred, so as to give them great firmness and immobility. Their upper surface is so narrow that not

more than from three-quarters of an inch to an inch of the blocks B B bears upon them on each side, my object in the whole construction being to obtain the greatest possible support for the blocks without bringing two wood surfaces in contact any more than is absolutely necessary.

The spaces between the sills are filled with sharp sand, which is directly contiguous to the whole under surface of the blocks, except along the narrow line where they bear on the sills, and which is also contiguous to the bottom and sides of the sills, as shown in Fig. 1.

Strips of board *c c* are inserted in the sand midway between the sills, and directly under the middle of the blocks, care being taken not to have them come in contact with the edges of the sills nor the under side of the blocks.

The upper edge of these strips should come nearly up to the blocks, as shown, so that if the sand should be displaced from under one side of them it will not be crowded over to the other side, but will rather be forced down under the sill on the same side, and brace that up stronger for the additional labor it has to perform of supporting the block alone.

The function of the strips, it will be observed, is not alone to prevent the sand from shifting under the level of the sills, but also to prevent it from shifting between them, the strips and the supporting-sills operating in combination to keep the sand uniform under the blocks.

I am aware that similar strips have been used under a pavement consisting of blocks resting entirely on the sand; and I am also aware that paving-blocks have been supported on joists under each edge, with sand between and on pieces of plank and boards. These features I do not claim as my invention; but

What I do claim, and desire to secure by Letters Patent, is—

A pavement consisting of the wooden blocks B B, isolated from each other by the elastic material C, and resting upon sills A A, buried in the sand, wooden strips *c c* being also inserted in the sand between the sills, substantially as and for the purposes described.

EATON SHAW.

Witnesses:

L. HILL,
J. S. FOWLER.