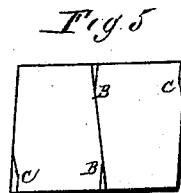
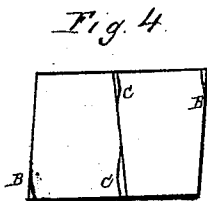
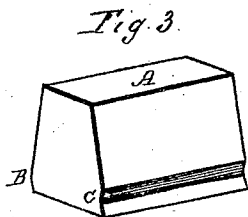
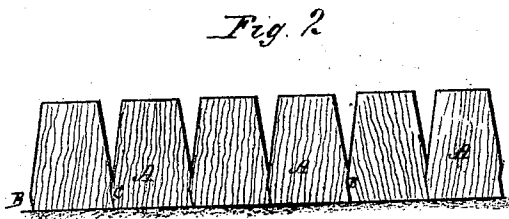
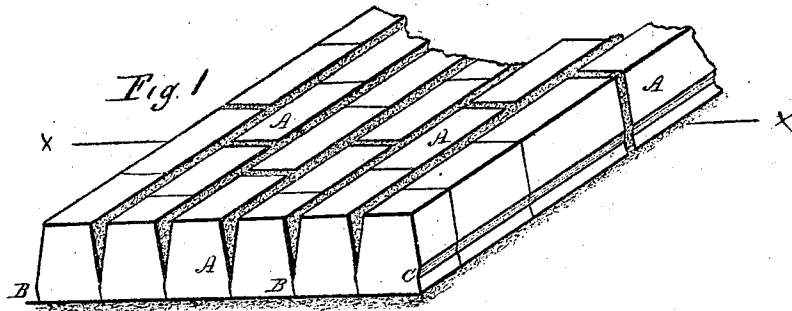


W. W. BALLARD.  
WOOD PAVEMENT.

No. 105,292.

Patented July 12, 1870.



Witnesses  
A. M. S. S. S.  
Edward R. R.

W. W. Ballard, Inventor  
by A. D. W. S. S. S. & Co.  
His Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM W. BALLARD, OF ELMIRA, NEW YORK.

## IMPROVEMENT IN WOOD PAVEMENTS.

Specification forming part of Letters Patent No. 105,292, dated July 12, 1870.

*To all whom it may concern:*

Be it known that I, WILLIAM W. BALLARD, of Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Wood Pavements; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making a part of this application.

My invention has for its object the production of a wedge-shaped paving-block, so formed at or near its base that when the blocks are placed in contact with each other in a pavement they will firmly interlock and prevent any possibility of a vertical movement; and my invention consists in taking off a slight portion of one corner of the block at its base in a line about parallel with the opposite bevel of the block, thus forming an obtuse angle on this side, and forming on the opposite side and corner of the block a depressed angle or cavity which shall exactly coincide with and fit over the obtuse angle referred to, as will be more fully set forth.

Figure 1 represents a perspective view of a section of pavement laid with my improved blocks; Fig. 2 is a section of the same taken at the line *x x*, Fig. 1; Fig. 3 is a detail view of one of the blocks; and Figs. 4 and 5 are detail plan views of two of the blocks as they leave the splitting-saws.

To enable those skilled to make and use my improved blocks, &c., I will proceed to describe the same, referring by letters to the accompanying drawing, similar letters denoting like parts in the several views.

A represents the ordinary wedge-shaped block, having one of its acute angles or base corners cut away in a line about parallel with the other beveled side of the block, thus forming an obtuse angle at B. The opposite base corner is cut away so as to form a depressed angle or cavity, C, which will exactly coincide with and fit over the angle B, so that in laying the pavement one row of blocks is simply placed in perfect contact with another, and thereby key or lock one another against any possible vertical displacement.

The curb-blocks are formed without any keying angles, to enable the others to be removed; and such other like blocks may be placed at

such points as may be deemed convenient or necessary, though I prefer to simply use the curb-blocks.

These improved blocks are adapted more particularly for the construction of that class of pavements where no board foundation is used, though they may be used with great advantage in other kinds of pavements.

In the class of pavements to which these blocks are particularly applicable the great disadvantage that exists is in the liability of one or more blocks settling or being forced down below the others, thus leaving depressions upon the face of the street, rendering it uneven and forming receptacles for the accumulation of decaying matter. This disadvantage is completely and perfectly overcome by my invention, as every block is keyed in lines parallel and at right angles to the curb, so that the pressure which might happen to be exerted upon any one block is equally distributed to those next adjacent; or, in other words, a pavement is formed having one solid "intact" base, and, at the same time, capable of being taken up block by block. It will thus be seen that, upon the principle of the arch, the pressure, no matter how great, upon the face of the pavement is distributed throughout a very great extent of the road.

The wedge-shaped spaces between the blocks are, of course, filled in the usual manner with concrete.

It has always been desirable to abolish and do away with the expensive wood flooring or foundation, for the reason that this is the first part of the pavement attacked by decay. It causes the whole thing to vibrate, and it is an impediment to the easy removal of sections of the pavement. Builders, however, have not been enabled to discard the same for the reasons hereinbefore set forth—viz., that the blocks would settle or be forced down upon the earth foundation, leaving depressions upon the face of the pavement.

The mode by which my improved blocks are formed constitutes no part of my invention, as any mechanic will naturally resort to the simplest and most economical of the very many plans known or suggested—one, for instance, being the use of two extra saws or cutters at the time the blocks are being split, without

extra handling. I have, however, shown in the drawing two ways in which the cuts are made, which will fully illustrate to one skilled that the lumber cut out is virtually of no importance in quantity and less in value, as the wedge-shaped space is proportionately lessened, and likewise the concrete.

Having described the construction and advantages of my improved pavement and block, what I claim as new, and desire to secure by Letters Patent, is—

A wood pavement formed of wedge-shaped blocks, constructed to interlock and support each other, substantially in the manner and for the purposes set forth.

In testimony whereof I have hereunto set my hand this 30th day of June, 1870.

WILLIAM W. BALLARD.

Witnesses:

WM. C. MCINTIRE,  
C. C. WILSON.