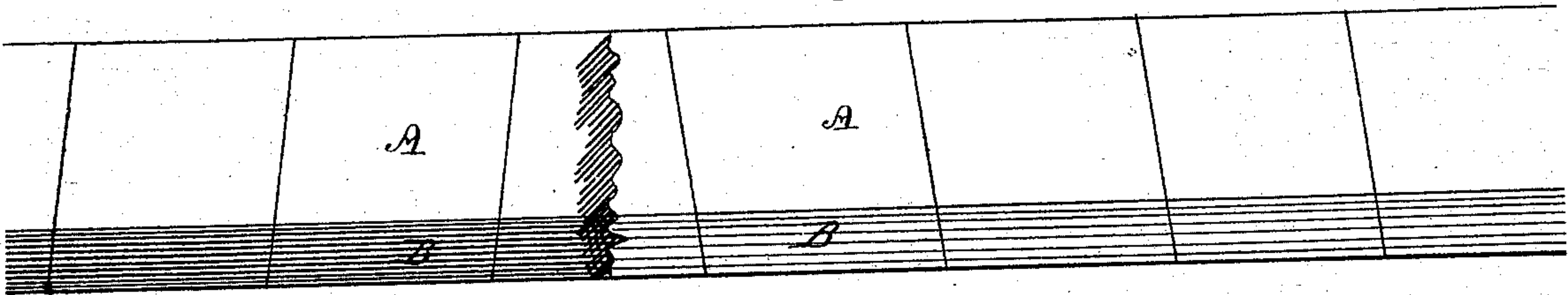


WILLIAM W. BALLARD.  
Improvement in Wood Pavement.

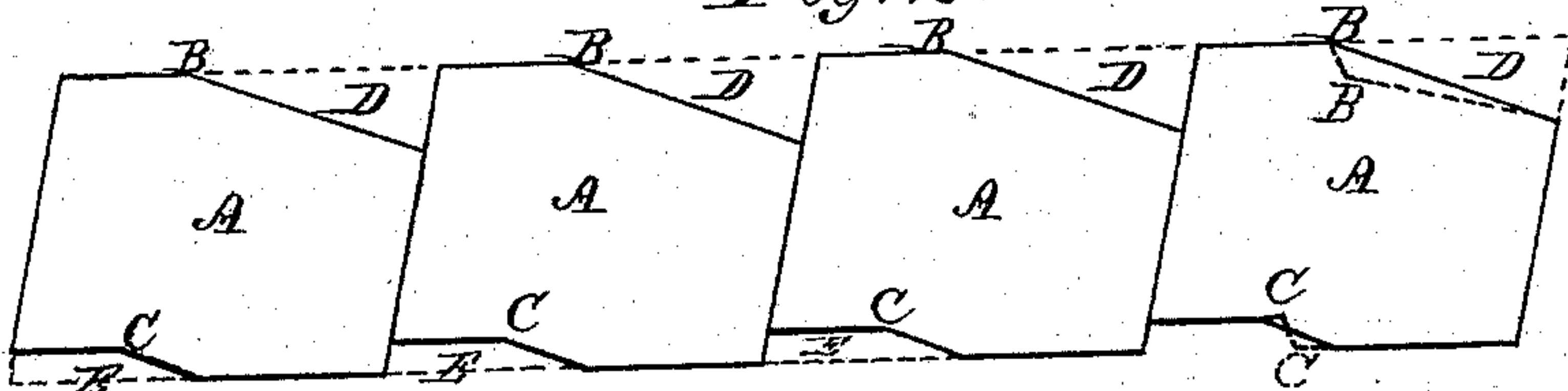
No. 125,001.

Patented March 26, 1872.

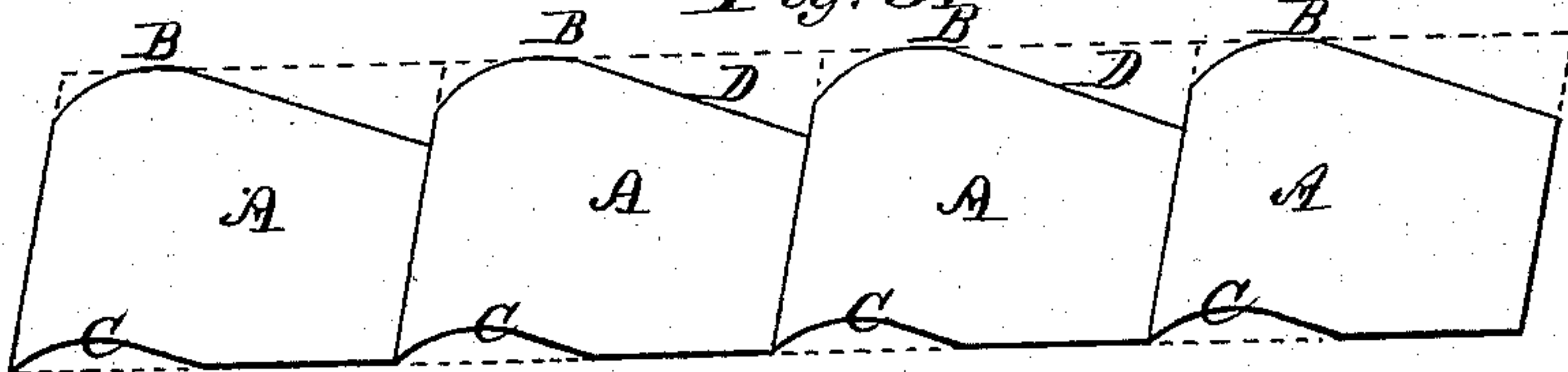
*Fig. 1.*



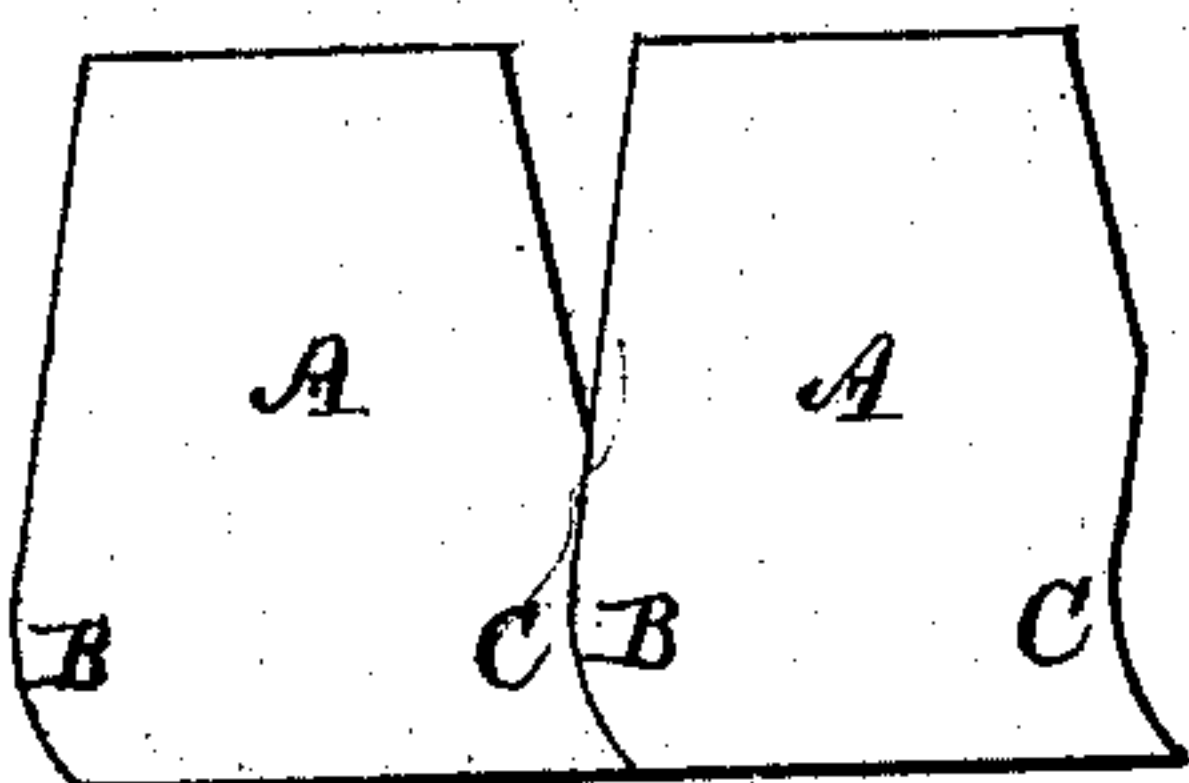
*Fig. 2.*



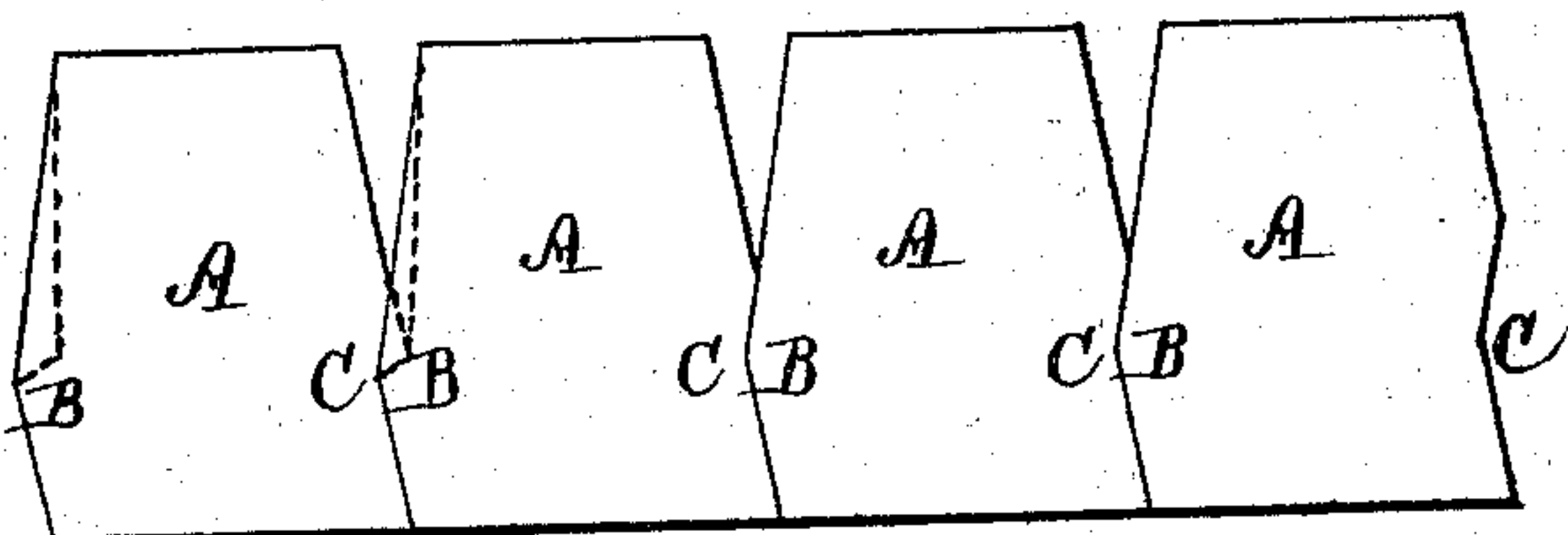
*Fig. 3.*



*Fig. 4<sup>a</sup>.*



*Fig. 4.*



Witnesses:

J. C. Brecht.  
John Taylor

Inventor:

W. W. Ballard.  
By his Attorney  
Wm C. McEntire

# UNITED STATES PATENT OFFICE.

WILLIAM W. BALLARD, OF ELMIRA, NEW YORK.

## IMPROVEMENT IN WOOD PAVEMENT.

Specification forming part of Letters Patent No. 125,001, dated March 26, 1872.

### SPECIFICATION.

*To all whom it may concern:*

Be it known that I, WM. W. BALLARD, of Elmira, in the county of Chemung and State of New York, have invented 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 relates to wooden pavements and the method of cutting the blocks; and consists in forming the blocks of wedge-shaped form adapted to interlock at or near the base without the loss of any considerable amount of lumber.

To enable those skilled to fully understand the nature of my invention, I will proceed to describe the same, referring to the accompanying drawing, in which—

Figure 1 is a view of a wood pavement extending from curb to curb, showing the alternate rows of blocks inclined and resting against each other in reverse directions. Fig. 2 is a plan view showing the method of cutting a wedge-shaped lock-block, (such as is covered by Letters Patent, granted to me July 12, 1870, No. 105,292,) from timber of single thickness, (that is, of a thickness capable of cutting but one block.) with little or no waste of material. Fig. 3 is a similar view, with the exception that the lock is formed by arched faces instead of angles. Fig. 4<sup>a</sup> represents two blocks, of the form shown at Fig. 3, placed in position and interlocking. Fig. 4 represents four blocks, such as are shown at Fig. 2, placed in position to interlock; and Figs. 1, 3, 4<sup>a</sup>, and 4, are simply intended to illustrate the mode of cutting, no claim being made to the blocks "*per se*."

Similar letters indicate like parts in the several figures.

A are the blocks formed with a projecting point or angle, B, on one side, anywhere below the center, and having a corresponding depressed angle, C, on the other side, adapted to receive the projecting angle B. At Fig. 1, the blocks are shown as having their ends beveled so that each row of blocks may be

made to incline in opposite directions, thus preventing the displacement of any one block at its end as it necessarily rests upon its neighbor at the end as well as being locked on the sides by the angular or curved lock. At Fig. 2, it is designed to show the blocks A as cut from timber of a single thickness, and it will be seen that the cut made by the saw to form the base of the block is so directed as to make an obtuse angle with the upper edge of the timber, after which the angular piece D is cut away, and also the piece E, thus completing the block, and it will thus appear of what great advantage the inclined base cut is, for when the block is set up the projecting and corresponding depressed angles D E are rendered much more acute, quite as much so as those shown in the patented block before referred to, and with a much less waste of material than would take place in cutting the latter from single timber. It will also be understood that another feature of the oblique base cut is, that I am enabled to obtain a block having a base equal to the whole thickness of the timber, notwithstanding the loss of the depressed angle piece from the original thickness of the material. This is a fair geometrical conclusion, for the extent of the base of the block depends upon the length of the "base cut," and that is determined by the direction or obliqueness of the cut. A modification of this method, and a consequent variation in the shape of the block, is made by cutting it, as seen in dotted lines at Fig. 2 on the right-hand block of said figures. The angles B and C, made by the intersection of the side lines, is varied, and angular shoulders produced as represented by the dotted letters B C. And by reference to Fig. 4, the relative position of the blocks is shown in dotted lines. It will be seen that by this method of cutting the block a very positive locking angle may be made without increasing the space between the tops of the blocks when in position, and this becomes important when the blocks are increased in height. The waste of material is always calculated by what is stripped from the base of the block, and it is important to know this fact in determining the value of any new



method of cutting. At Fig. 3 these locking angles D E. are shown with curved faces in which all the waste is from the side of the block opposite to that on which the waste takes place in such blocks, as shown at Fig. 2. Figs. 4 and 4<sup>a</sup> show these two kinds of blocks placed in position and interlocking, and represent clearly the advantage of the oblique base cut.

Having described my invention, what I claim

as new, and desire to secure by Letters Patent, is—

The method herein described of forming a wedge-shaped lock-block from single timber, as set forth.

In testimony whereof I have hereunto set my hand and seal this 6th day of March, 1871.

Witnesses: WM. W. BALLARD.

WM. C. MCINTIRE,  
EDWARD L. MARSH.