

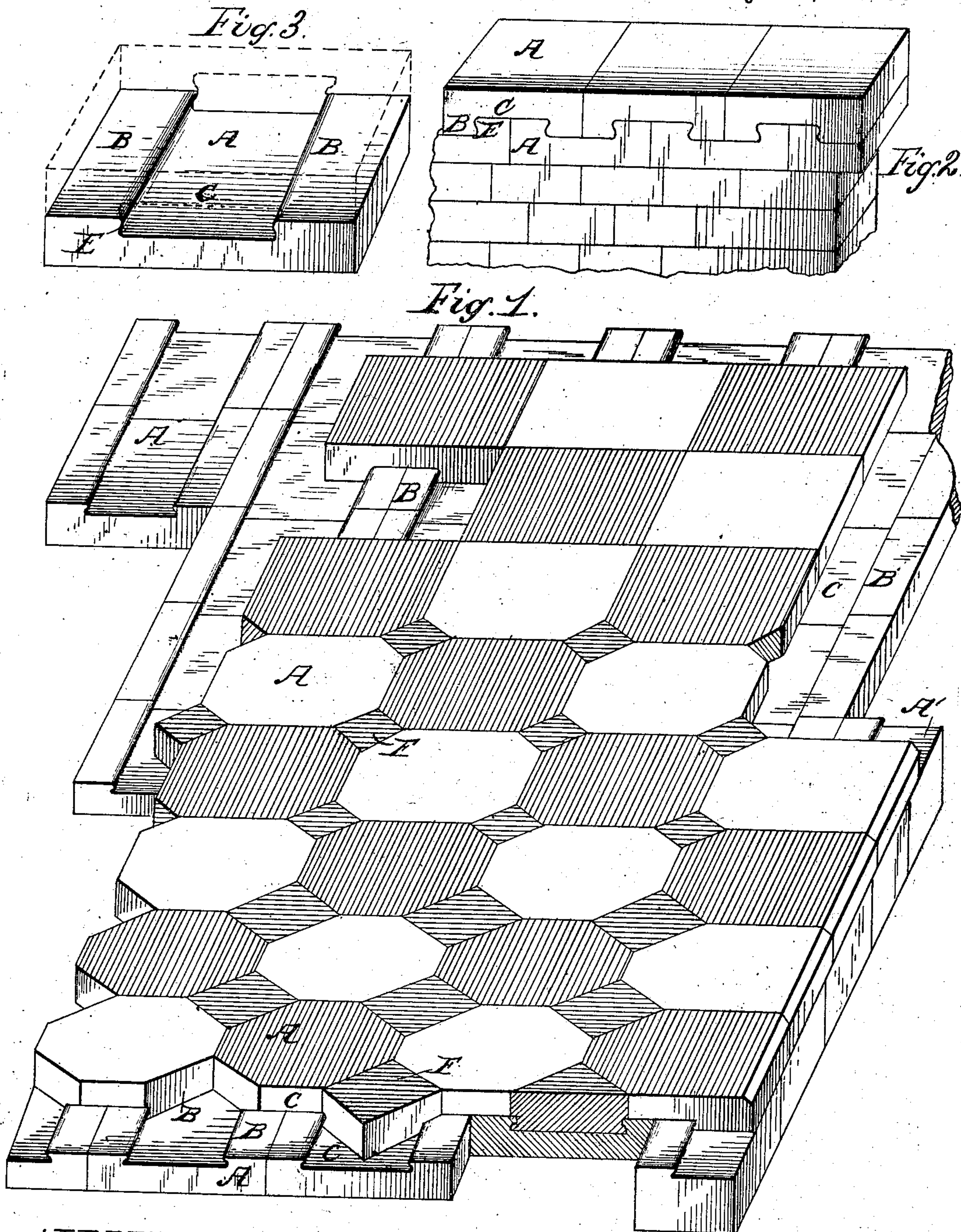
(No Model.)

3 Sheets—Sheet 1.

D. O. LOY.  
TILE WORK.

No. 362,846.

Patented May 10, 1887.



ATTEST—

Wm. S. Scott  
J. M. Wister

INVENTOR

D. O. Loy

By Saml. J. Wallace Atty.



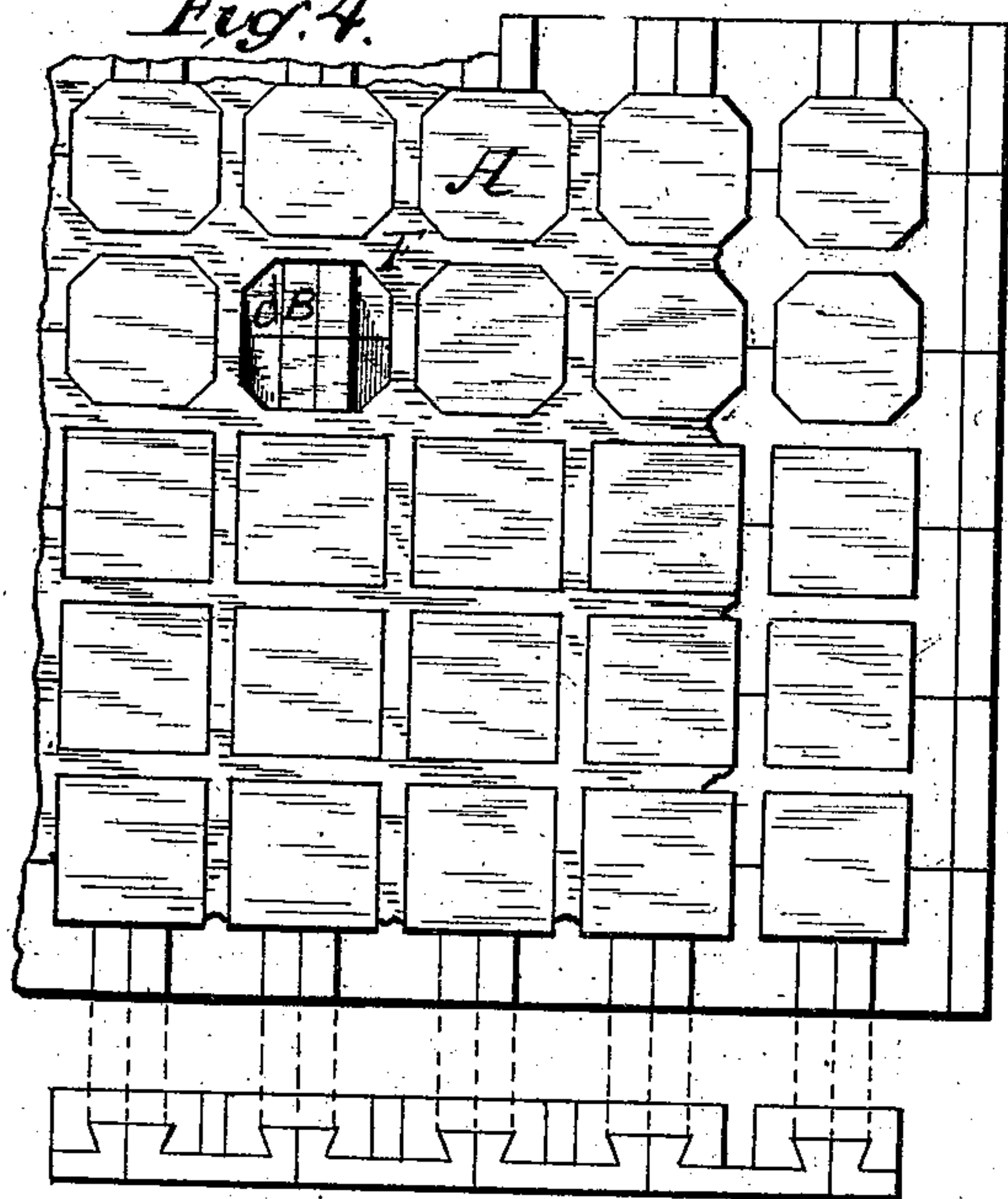
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D. O. LOY.  
TILE WORK.

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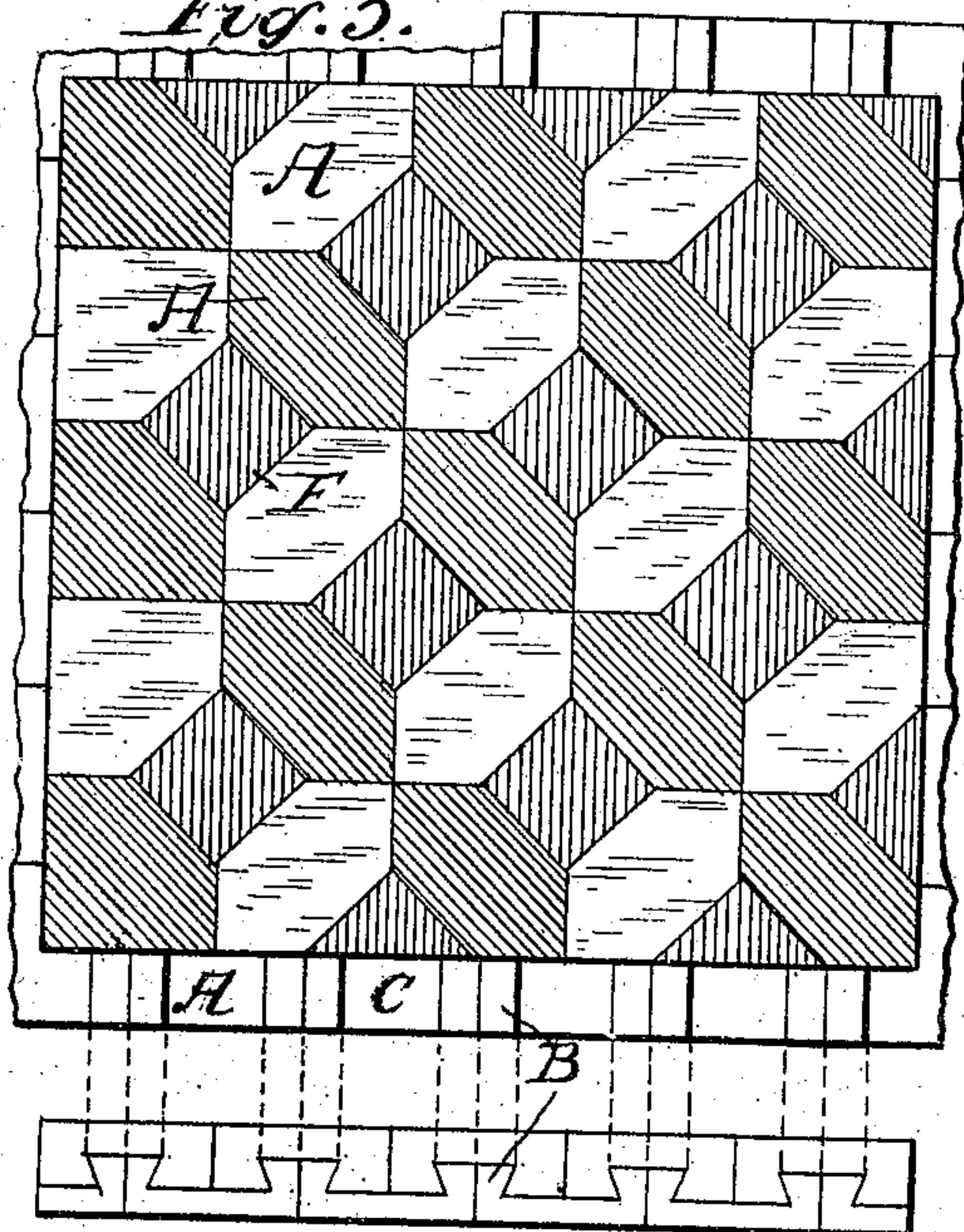
No. 362,846.

*Fig. 4.*

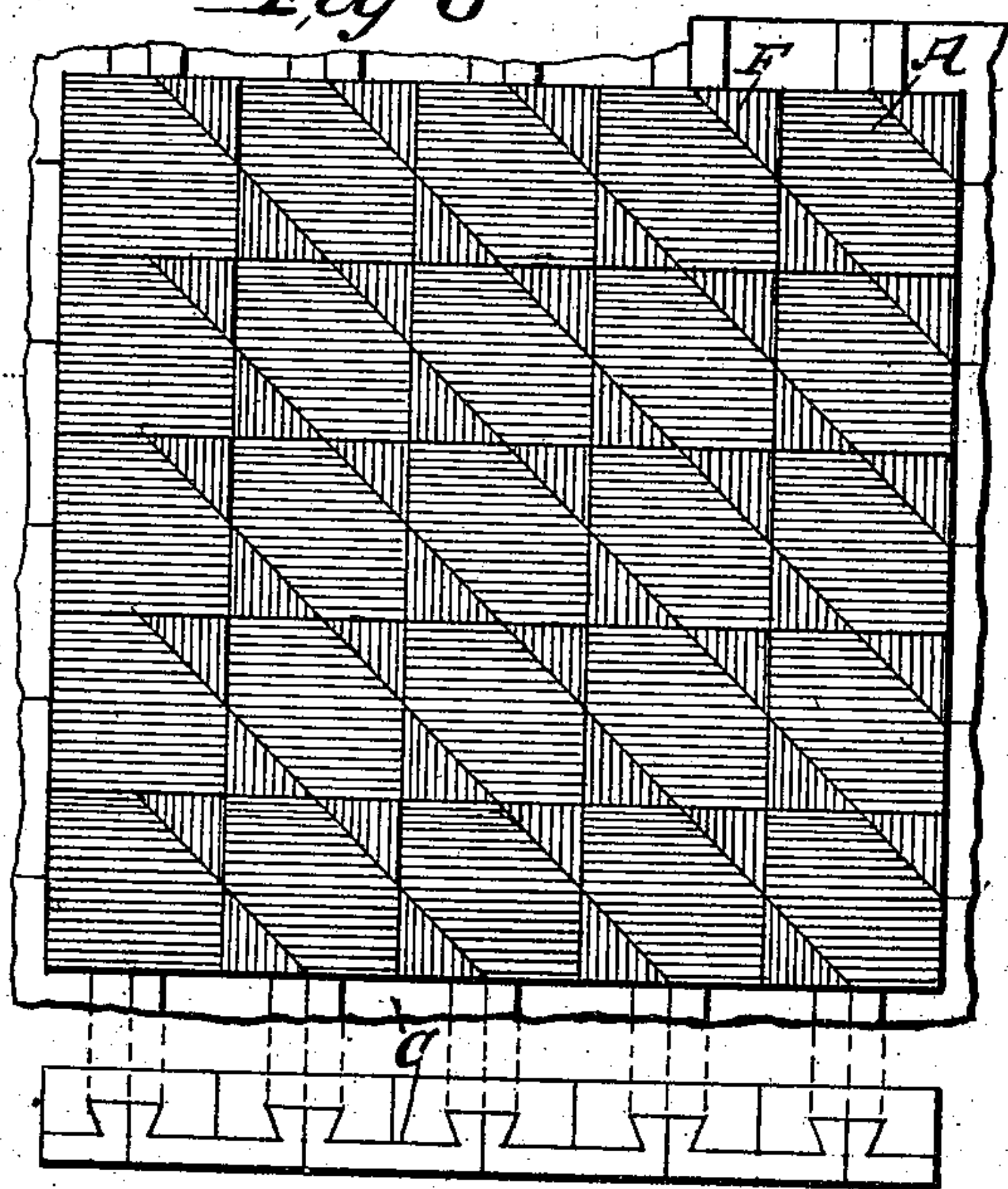


Patented May 10, 1887.

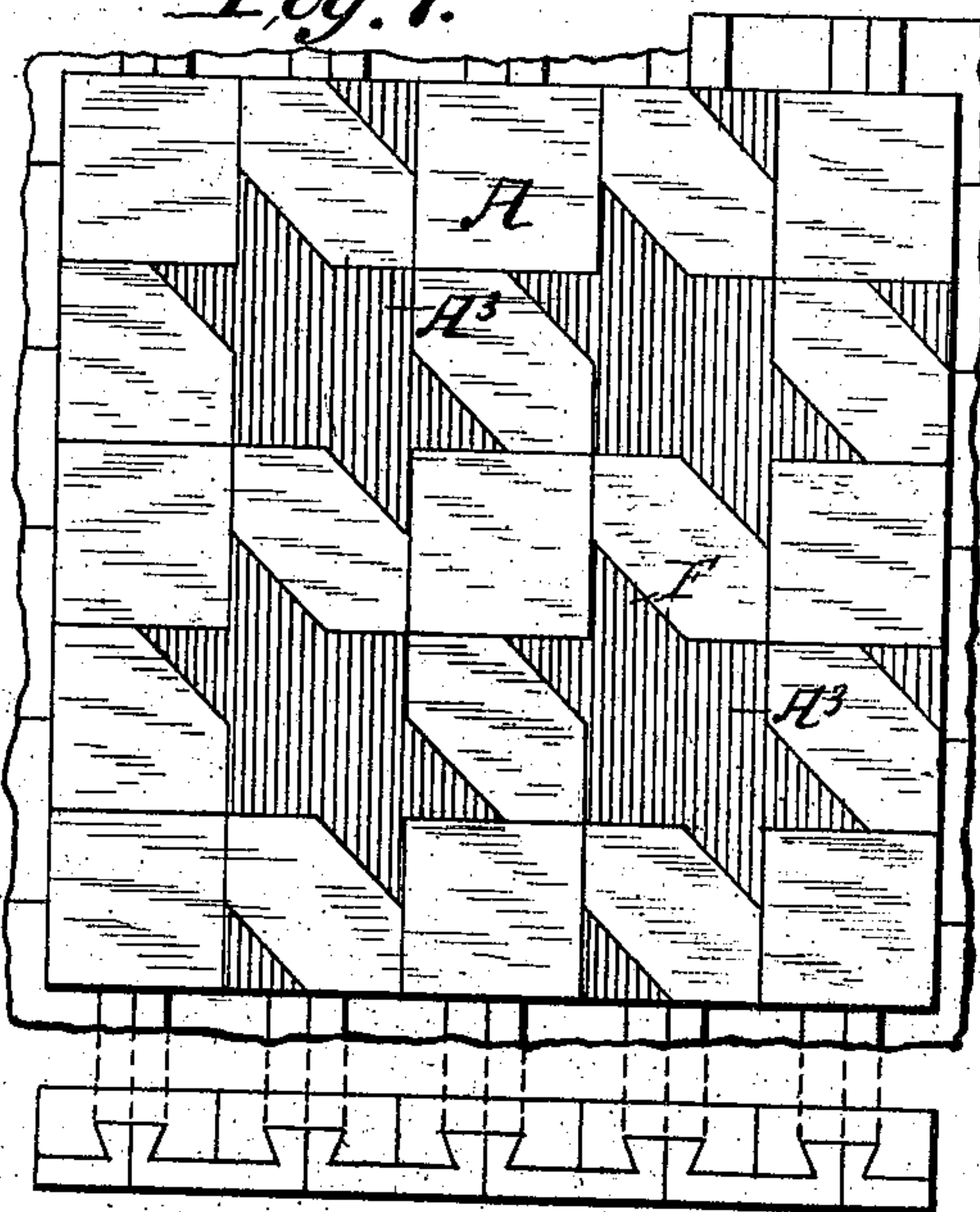
*Fig. 5.*



*Fig. 6.*



*Fig. 7.*



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(No Model.)

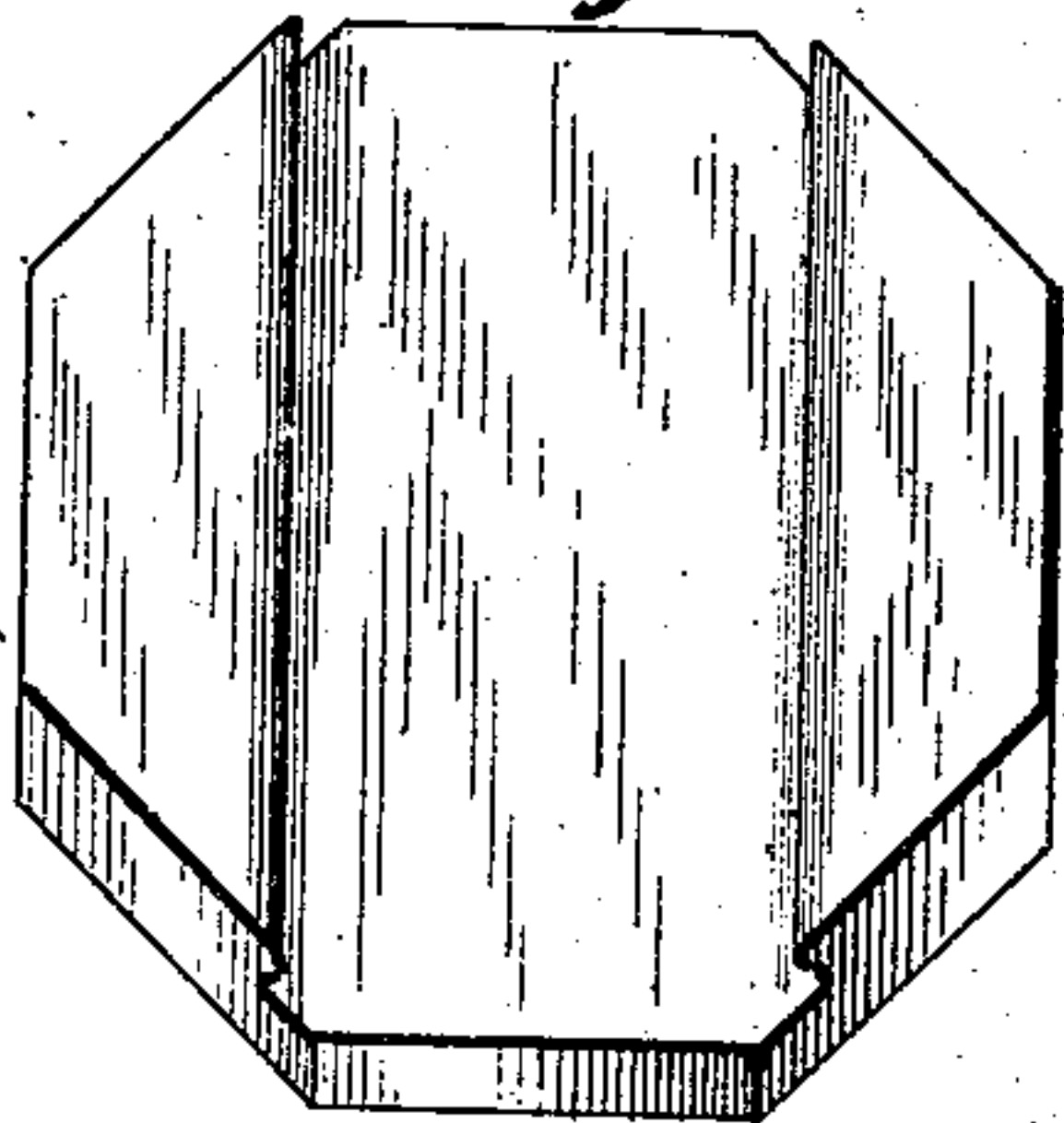
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D. O. LOY.  
TILE WORK.

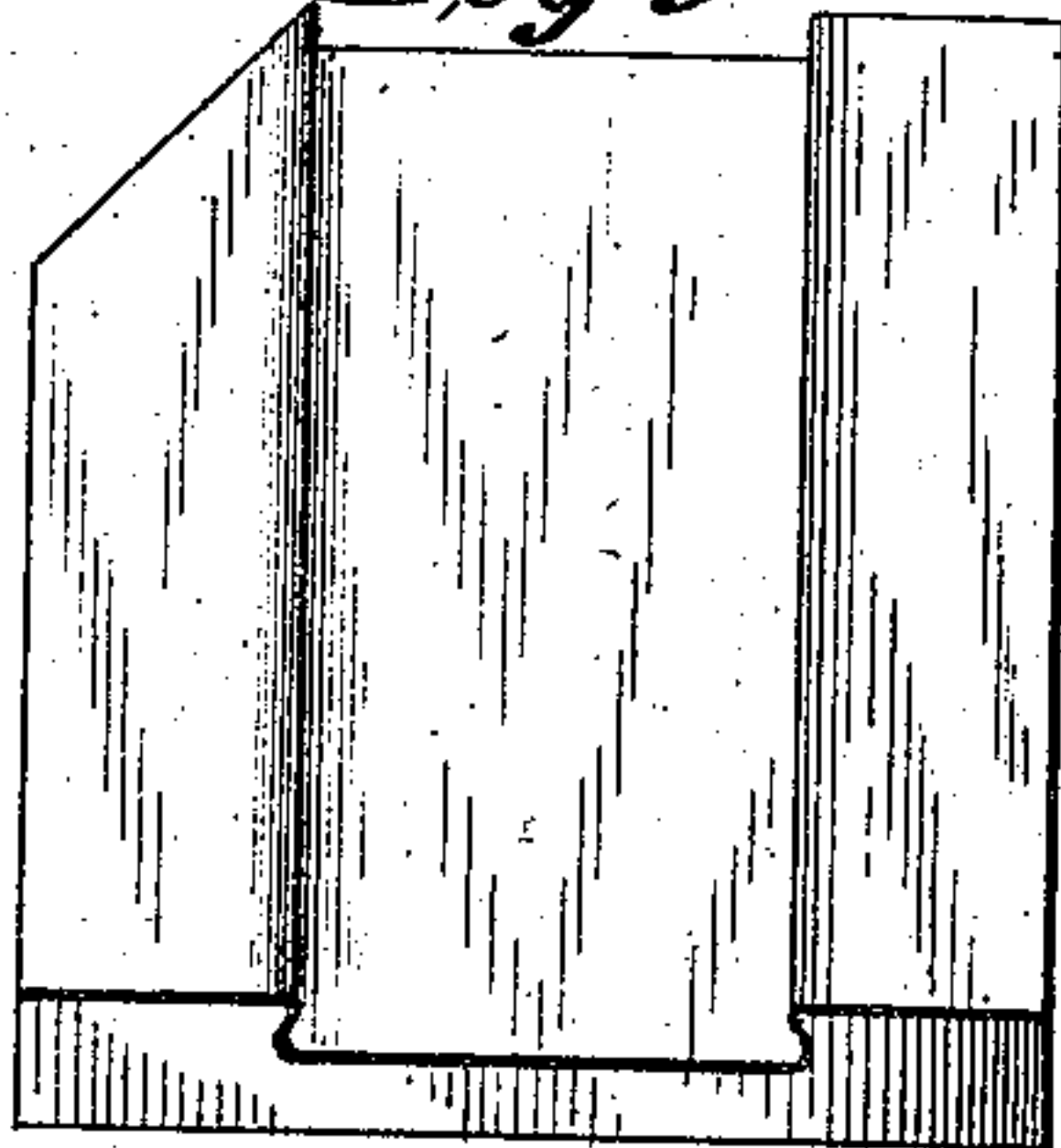
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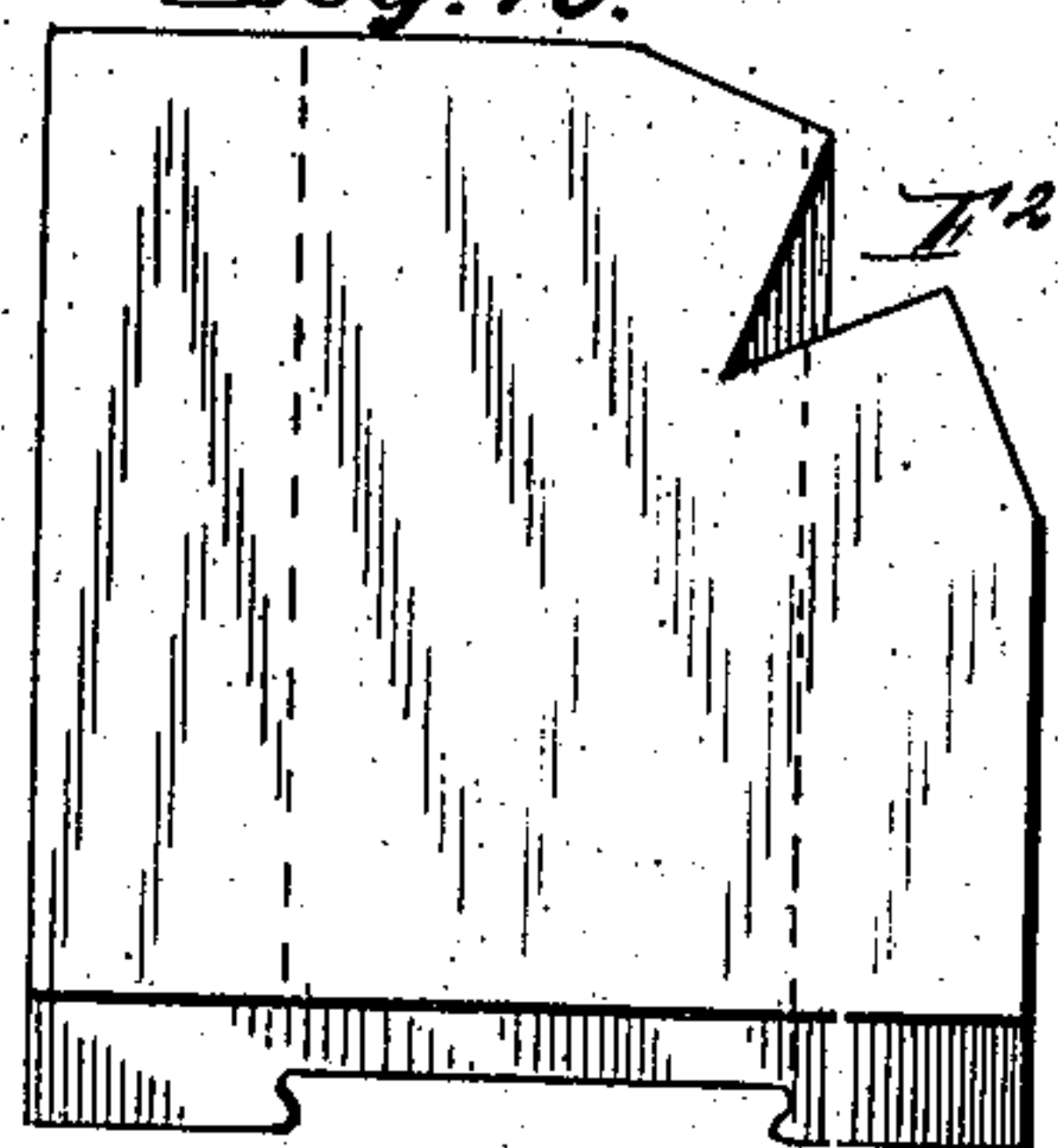
*Fig. 8.*



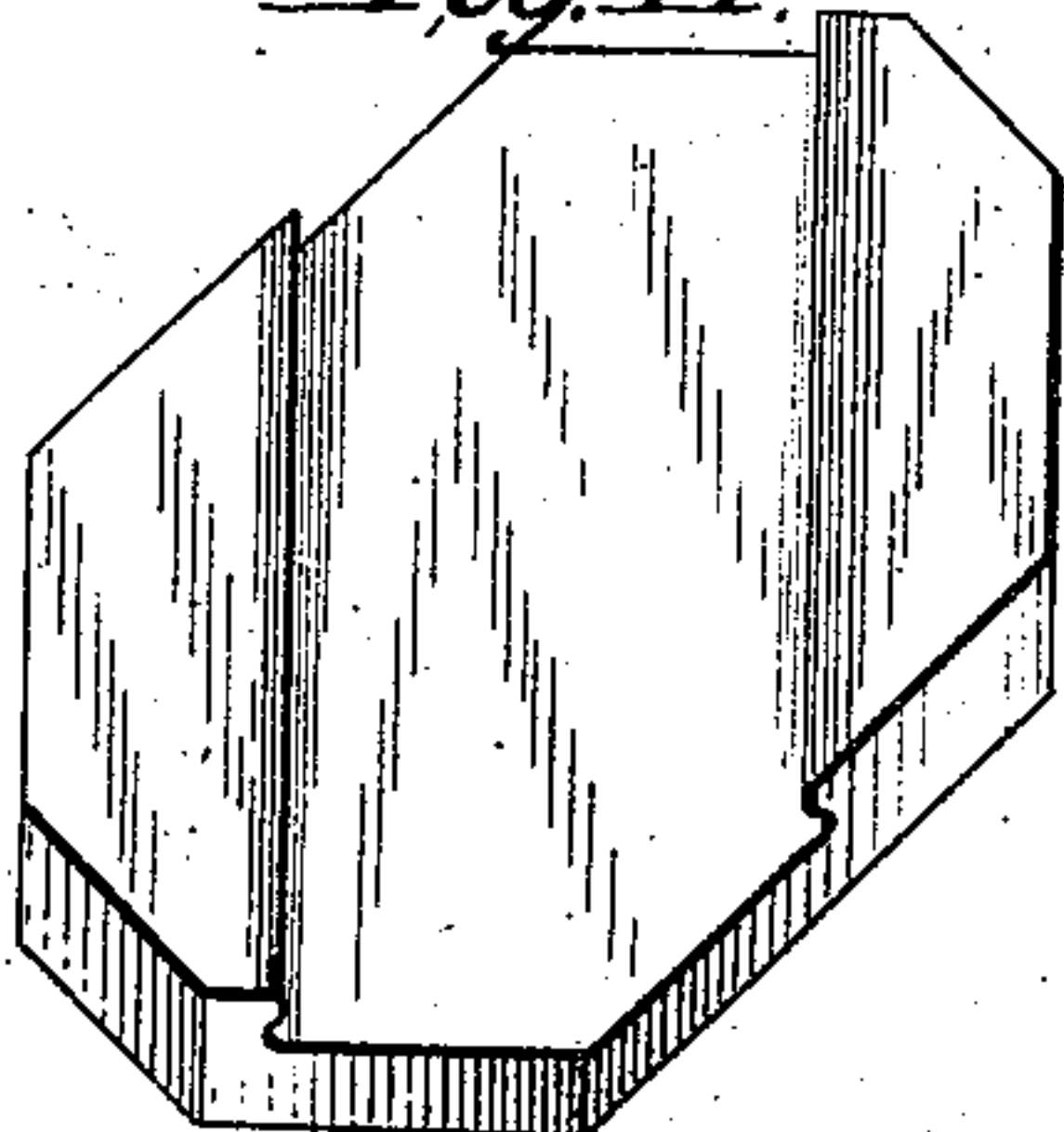
*Fig. 9.*



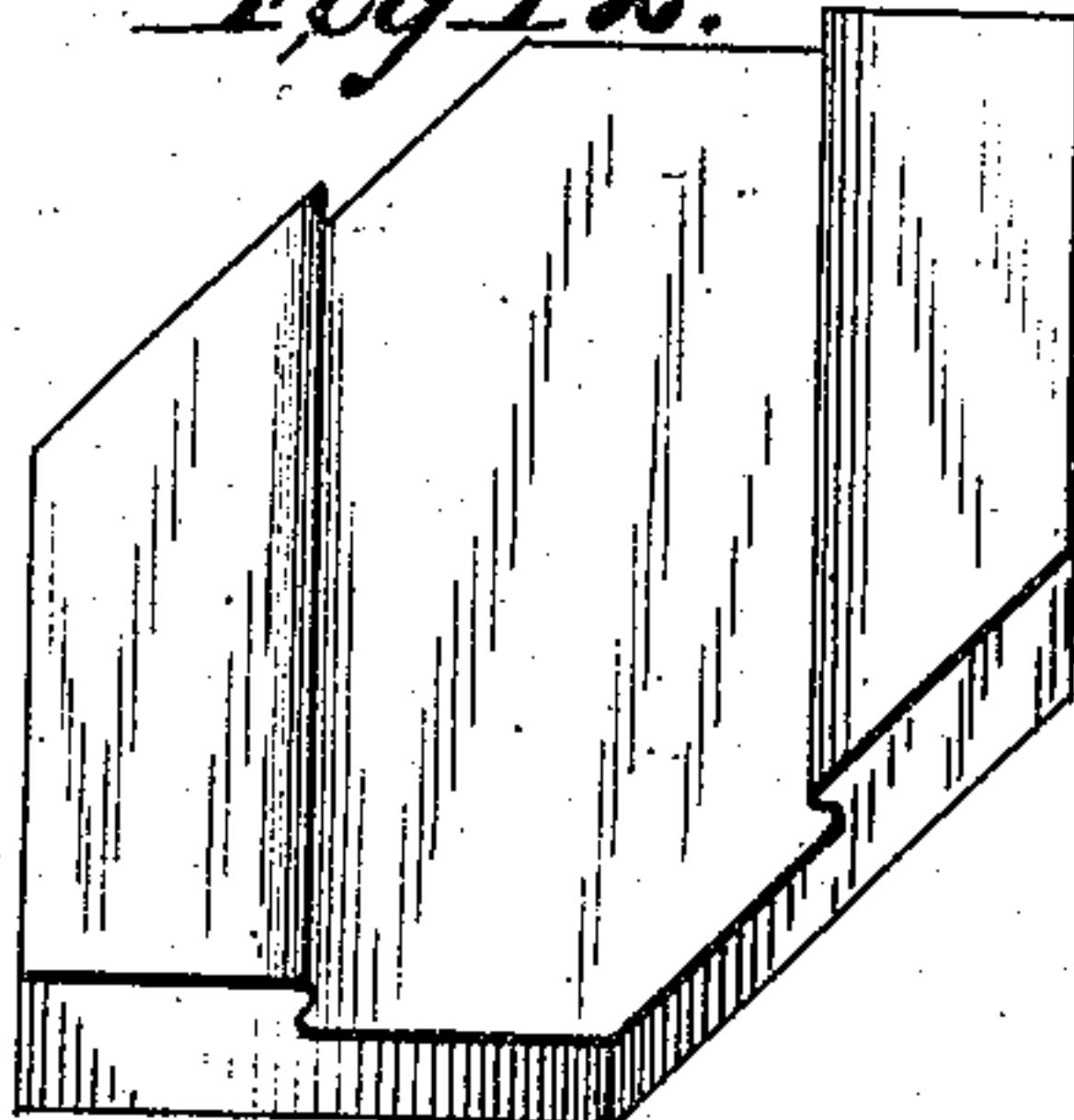
*Fig. 10.*



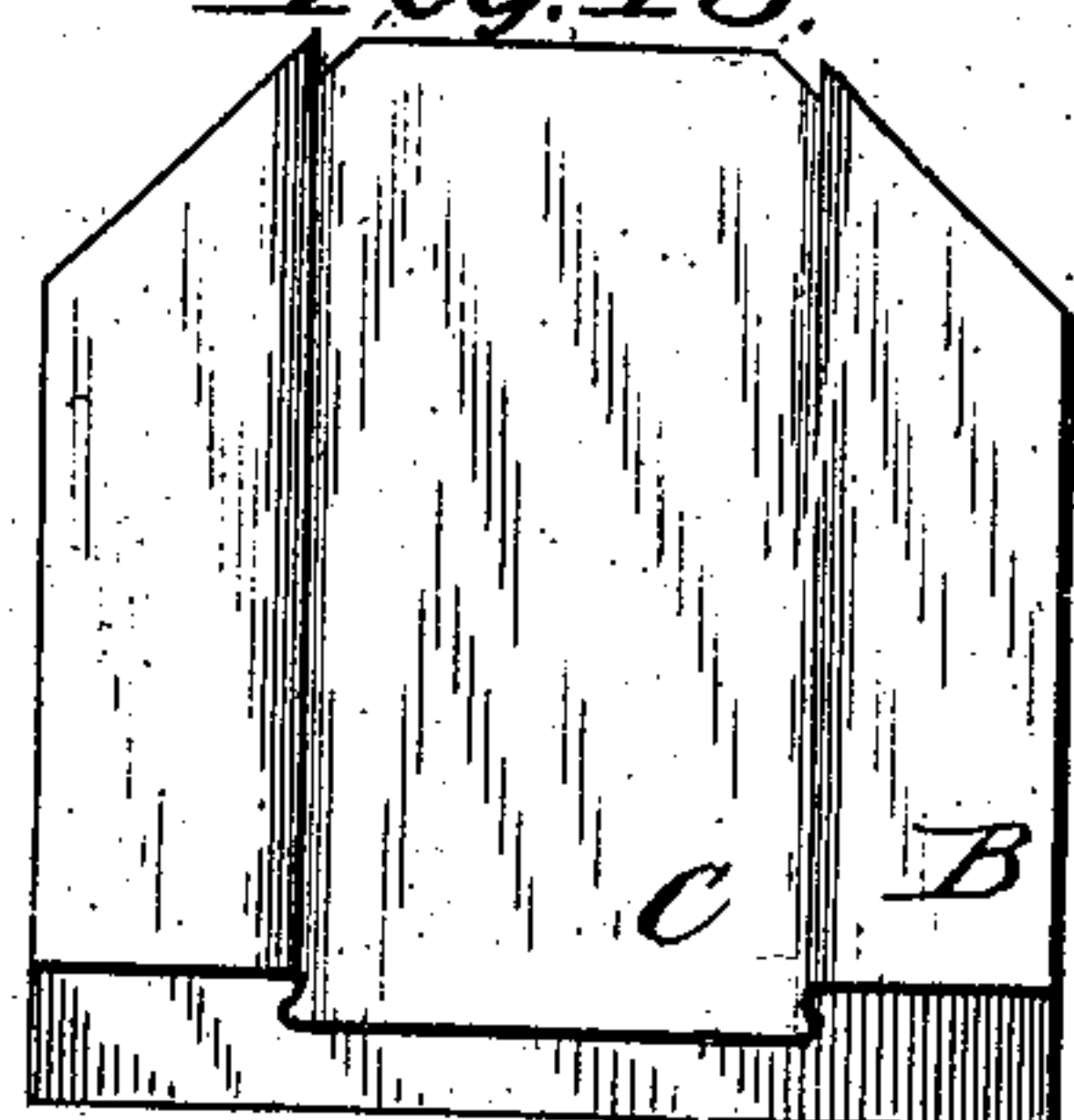
*Fig. 11.*



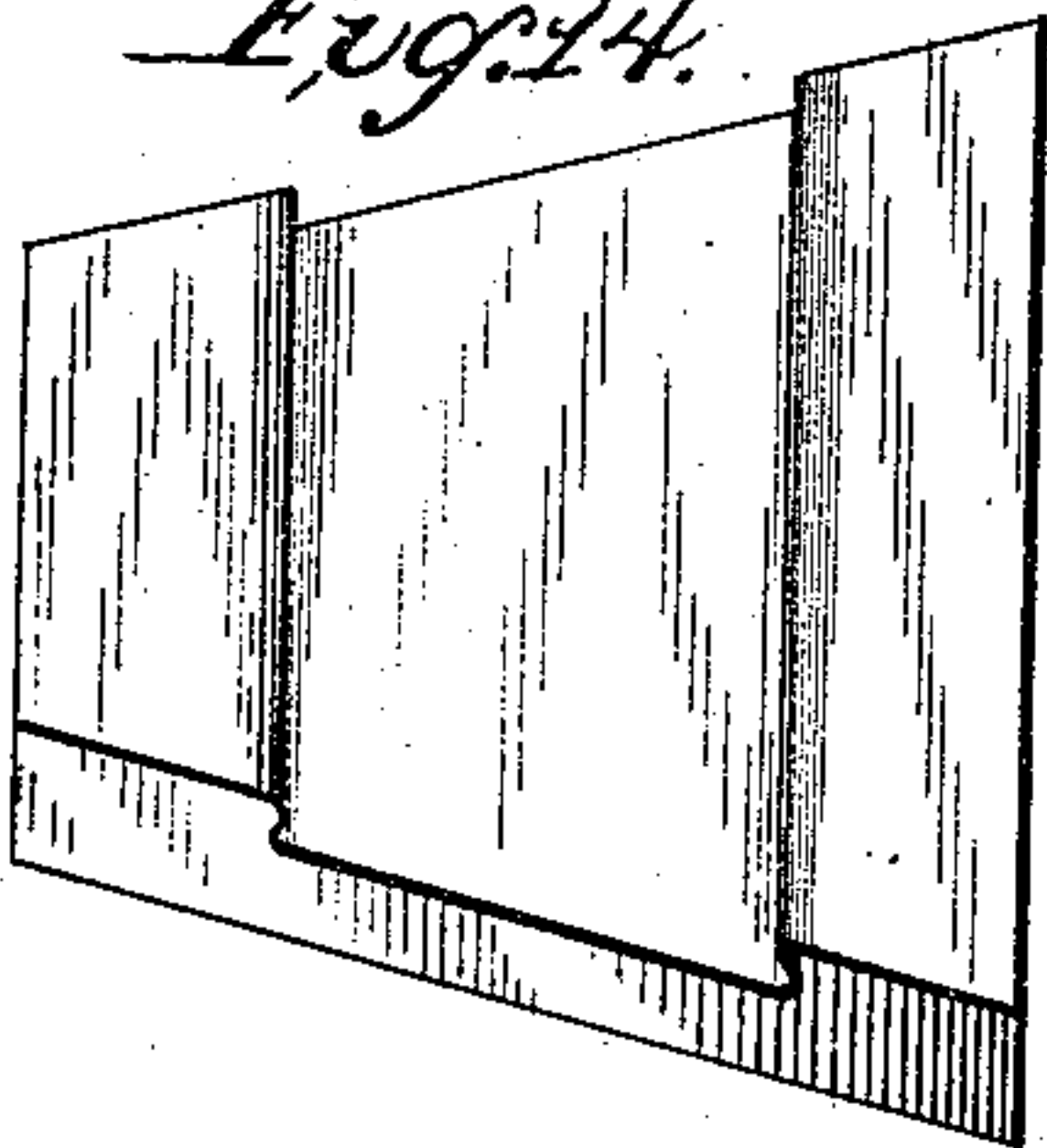
*Fig. 12.*



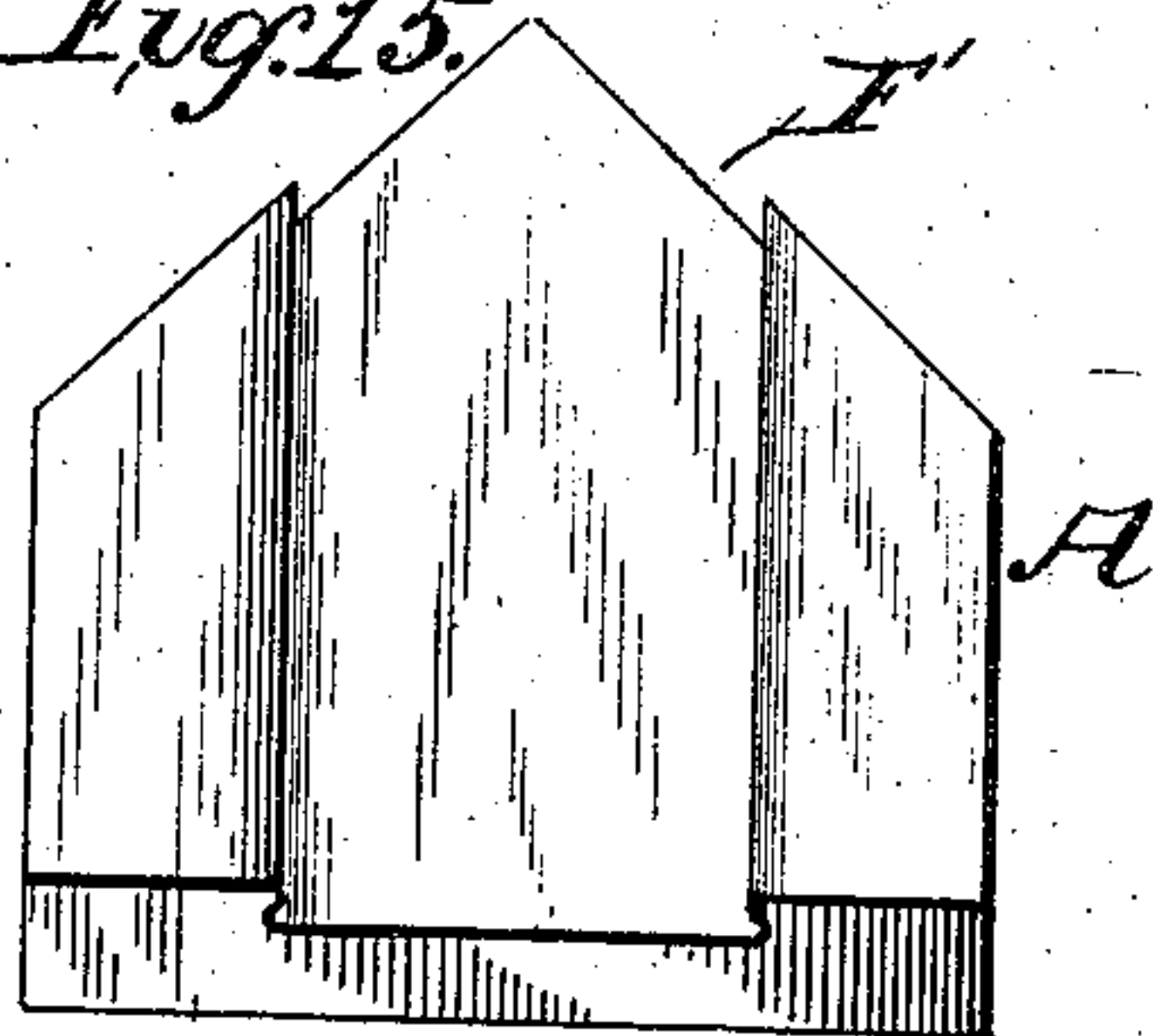
*Fig. 13.*



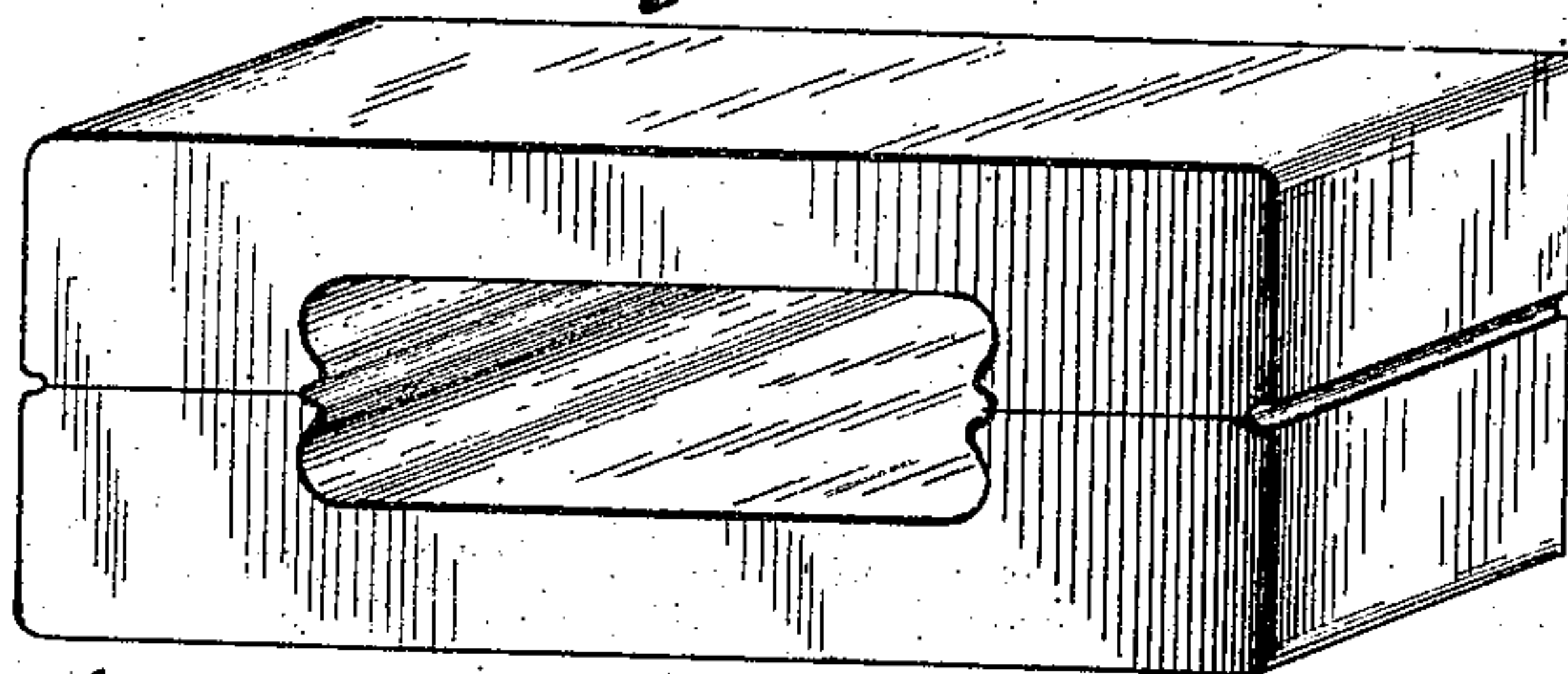
*Fig. 14.*



*Fig. 15.*



*Fig. 16.*



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# UNITED STATES PATENT OFFICE.

DANIEL OSCAR LOY, OF MONTICELLO, ILLINOIS.

## TILE-WORK.

SPECIFICATION forming part of Letters Patent No. 362,846, dated May 10, 1887.

Application filed February 23, 1887. Serial No. 228,579. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL OSCAR LOY, of Monticello, Piatt county, Illinois, a citizen of the United States, have invented a new and useful Improvement in Tile Work, of which the following is a specification, referring to the accompanying drawings, in which—

Figure 1 illustrates the tile work in course of construction as a pavement. Fig. 2 illustrates same as a wall-coping. Fig. 3 illustrates formation of the tile. Figs. 4 to 15 illustrate various modes of cutting the tile and figures formed therefrom. Fig. 16 also illustrates formation of the tile.

This invention consists in a peculiar improved system of tile-work for paving walks, floors, &c., and for coping, and in tile therefor, as set forth hereinafter and as illustrated.

The tile-work is formed of tiles A, of square, oblong, octagonal, or other forms. These tile are each made with one plain surface and an opposite face provided with two projecting ledges, B, along two opposite sides, and a sunken channel, C, between them, having its side walls, E, undercut to form a dovetailed seat to engage with and hold the ledges of like tile in an opposite course, and having the angles connecting walls E with the ledge and channel planes curved or otherwise cut away and filled, the one to correspond with the other, to strengthen the joint angle and to enable the two ledges of the opposed tile to fit solidly together.

The tile A are formed on hollow tile-machines having dies suitably formed, by cutting the material into two halves as it comes from the machine, and dividing these into sections, as illustrated in Figs. 3 and 16, or in any other suitable way.

The tile are built into two layers or courses, with their plain faces outward and their channeled faces together, having their projecting ledges fitted into the channels of the opposite courses to bind them together into one structure. The ledges of adjoining tile in one course fit into one tile of the other course, and the ledges of this in turn fit in a like way into the channels of those, together with the ledges of its adjoining tile. This arrangement forms a peculiar structure of interlocking ledges throughout to any extent, which bind the

whole together with bonds in the direction of the plane of the structure, while the dove tailing of the ledges of two tile into the channel of one forms a bond in a direction vertical thereto, which prevents any single tile being removed either from a pavement or wall or from a coping, as in Figs. 1 and 2. The ledges are half the width of the channel to enable those of two to fit into one in this way.

The tile are built into pavements, as illustrated in Figs. 1, 4, 5, 6, and 7, for walks or floors in this way and into walls in a corresponding way. In this each tile of one course fits into the channels of four tile in the other course, overlapping and covering the joints both ways, and interlocking with them, so they mutually hold each other in place. The alternate tile of the upper course are formed of burned clay, as are those of the lower layer, and the intermediate tile of the upper course are formed of cement or other plastic material, which is run in and leveled off to fill up the spaces in all directions to the clay tile of the upper course and to the dovetailed channels of the lower course and into all spaces between the adjoining tile in both courses, so as to render the whole structure solid, binding it together securely, thus securing a result not practicable with burned tile alone. In some cases the corners of the top layer are cut off and filled in a like way to secure this result. In other cases the top course or a portion of it is formed of tile of less size than the lower course, and is placed in the same way, Fig. 4, over the joints of the lower course, leaving spaces between the top tile, as shown, which are filled in the same way to produce this result.

A great variety of ornamental patterns are made by varying the colors, the sizes of the corner-cuts, and their arrangement, as illustrated in Figs. 1, 4, 5, 6, 7, and 8 to 15, and various other modifications may be made.

I claim—

1. A tile having one plain surface and an opposite face provided with two projecting ledges and a sunken channel twice their width between them, having undercut side walls, by which it engages dovetail-like with a support, substantially as and for the purpose set forth.
2. A tile having one plain face and an op-



posite face provided with two projecting ledges and a sunken channel twice their width between them, having side walls undercut and their angles removed correspondingly, so as to fit dovetailed with the ledges of two abutting similar tiles in an opposite course.

3. The structure formed of two courses of tile having plain outer surfaces and parallel thereto faces toward each other, which bear in each tile two projecting ledges, and one dovetail channel between them, into which fit ledges from two other similar tiles in the opposite course, and by which the whole is bound together by both lateral and dovetail bonds.

4. The structure formed of two courses of tile having a plain outer face and parallel thereto faces toward each other, which on each tile have two projecting ledges and a dovetail channel between them, into which fit ledges from four tiles in the opposite course, by which the whole are bound together by a lateral and a dovetailed bond.

5. The structure formed of two courses of tile having a plain outer face and interlocking faces toward each other, which on each tile have two projecting ledges and a dovetail channel between them, into which fit ledges from four tiles in the opposite course, by which the whole are bound together by a lateral and a dovetail bond, a portion of the tile in the upper course formed by being filled with plastic materials, substantially as set forth.

6. A pavement formed in two courses of tile having a plain outer face and interlocking faces toward each other, having on each tile two projecting ledges and a channel between them, into which fit ledges from tiles in the opposite course, the tile of the top course having corners cut away and filled with plastic materials.

7. In a pavement, the combination of two courses of tile having a plain outer surface and interlocking faces toward each other, having on each tile two projecting ledges and a channel between them, into which fit ledges from other tiles in the opposite course, giving a lateral bond, a portion of the tile of the upper course being formed by filling spaces with plastic materials, substantially as set forth.

8. In a pavement, a course of tile provided with upward-projecting dovetailed ledges, combined with a course of tile thereon, a portion of the tile of which have channels and engage on opposite sides of ledges, and another portion of which lie between and engage with ledges on opposite sides of them, substantially as set forth.

DANIEL OSCAR LOY.

Witnesses:

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M. A. BALLINGER.