L. DE FOREST.

Marquetry.

No. 26,898. Patented Jan'y 24, 1860.

Fig 2.

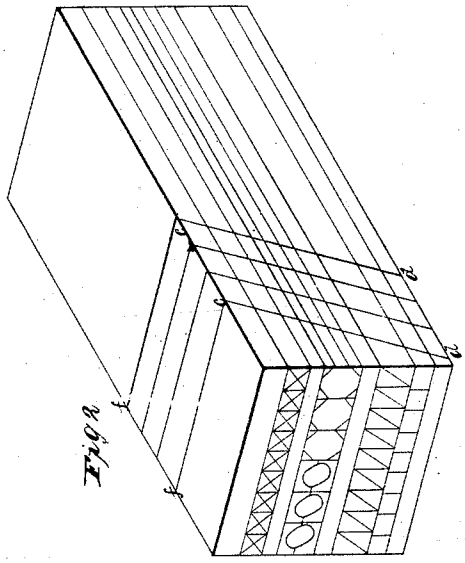


Fig 4.

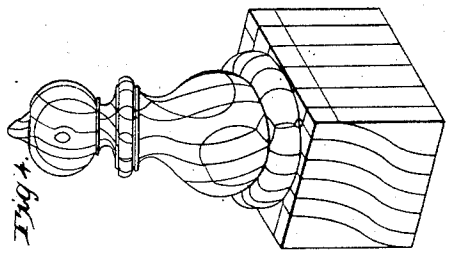


Fig 1.

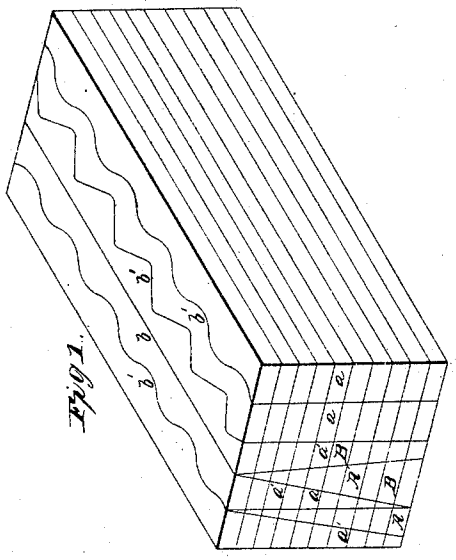
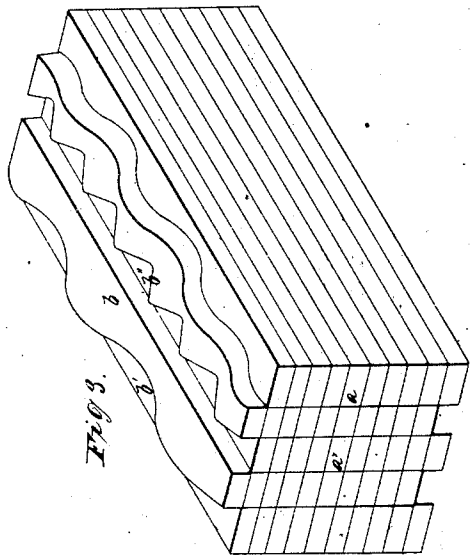


Fig 3.



Witnesses.
P. A. C. Taubersdimidt
Edwin Thomas

Inventor
L. De Forest by his attorney
F. Gunnyate Smith

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UNITED STATES PATENT OFFICE.

LINSON DE FOREST, OF DERBY, CONNECTICUT.

IMPROVED METHOD OF MANUFACTURING WOODEN MOSAICS.

Specification forming part of Letters Patent No. **26,898**, dated January 24, 1860.

To all whom it may concern:

Be it known that I, LINSON DE FOREST, of the town of Derby, county of New Haven, State of Connecticut, have invented a certain new and useful improvement in methods of arranging wood for the purpose of preventing warping and forming variegated and ornamental work, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a perspective view of a block composed of boards of different-colored woods, showing the arrangement of the layers, and also the manner of dividing the block for the purpose of producing ornamental work. Fig. 2 represents a perspective view of a block composed of boards and strips of different colors, the strips being of regular geometric forms in their cross-sections, and arranged in juxtaposition and in alternate layers with the boards, and also another way of dividing the block. Fig. 3 represents a perspective view of a block, showing the position in which the layers of different description or different-colored woods are placed in relation to each other after being sawed through and slid on each other for the purpose of producing ornamental wood-work. Fig. 4 represents a perspective view of one of the blocks after being cut through and united and finished to form an ornamental piece of wood-work.

The method heretofore adopted in arranging woods for the purpose of preventing warping or springing was to arrange the same or different varieties of woods in alternate layers with the grain crossing at varying angles, and then unite the different layers by some strong cement.

In the formation of ornamental wood-work, produced by uniting various-colored woods, woods of different colors are cemented together either edgewise or in alternate layers, and then worked into the shape required to produce the ornament.

In the production of ornamented tesselated work woods of various colors are joined together at their edges, the grain of the wood running in different directions in relation to each other.

My invention for preventing the warping of wood and forming variegated and ornamental wood-work consists in forming a composit block by cementing together slabs or blocks of regular or irregular geometric forms of different descriptions or different colored woods, and then sawing or cutting the block into pieces, and moving or sliding these pieces on each other a greater or less distance, so as to change the relation the different woods or woods of different colors originally bore each other, and then cementing these pieces together, and cutting or turning the secondary block thus made to the required form.

By reference to the accompanying drawings those acquainted with the art will fully comprehend the nature of my improvement and the manner of carrying it into effect. Boards of different colored woods, A and B, are arranged on top of each other, so that the colors alternate, and then cemented together. The different layers of boards may be arranged with the grain of the wood running in the same or in different directions. Boards cut from the log transverse or inclined to the grain may be used to form each layer, or alternate with boards cut with the grain. Each layer may be made of a single piece, as shown in Fig. 1, or the intermediate layers may be made up of strips or blocks cut into any regular geometric form, as represented in Fig. 2, and then cemented, so as to form a single board; or the whole or part of the block may be made of strips or blocks of different-colored woods, cut into regular or irregular shapes, and then united to form a solid block.

Strips, blocks, or boards of different forms, of different colors, and of different varieties of wood may be arranged in relation to each other in any position that fancy may dictate, so as to form one block when cemented. The blocks thus formed are sawed apart in one direction, as represented by the lines *a* and *a'*, Fig. 1—that is, in a plane perpendicular or inclined to the plane of the joints between the different layers, or the plane of the bed on which the block rests while being sawed; and in the other direction, as represented by the lines *b*, *b'*, and b^2, Figs. 1 and 3—that is, in straight, curved, or zigzag lines in the direction of the length of the block; or the blocks may be sawed apart one direction, as represented by the lines *c d*—that is, in a plane inclined to the layers in the direction of the length of the block, and in the other in the

direction, as represented by the lines *c f*—that is, in a strait line across the block. These compound blocks, after being thus sawed through in one or more places, each part thus sawed off, or every other part, is slid or moved transversely, as shown in Fig. 3, or in such manner as to change the position the layers or blocks of different description and different-colored woods originally bore to each other and the distance moved is greater or less than the thickness of one of the original layers or blocks. After the parts sawed off are thus slid, they are cemented together.

In sawing the block in different directions, and in sliding or moving the different pieces after being sawed off, the relation or the position the different layers of wood originally bore to each other is changed, and by this change an infinite variety of form and mingling of colors in the different varieties of wood forming the original block is produced. The secondary block thus formed is then cut or turned in the usual manner to form the required article. In thus changing the position of the different layers of wood or strips or blocks in relation to each other the tendency of the wood to spring to warp is entirely obviated, and in all positions, subjected to the strongest tests of heat or cold, moisture, or dryness, the article thus manufactured preserves it original form.

I do not confine myself to cutting or dividing the composit blocks in any particular direction, as the direction in which they are cut may be varied to give the required form or outline to the pieces forming the composit blocks, provided, however, that the blocks are so divided that the pieces cut off can be slid in one direction, so as to change the original position the slabs or blocks bore to each other. Neither do I confine myself to the use of woods alone, as bone, ivory, horn, metal, rubber, or other material may be combined and used with wood or with each other for the purpose of producing ornamental work.

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

The method or arranging, dividing, rearranging, and uniting woods of different descriptions or different colors, substantially as described, for the purpose as herein set forth.

In testimony whereof I have subscribed my name.

LINSON DE FOREST.

Witnesses:
F. S. SMITH,
EDWIN JAMES.