Oct. 14, 1930. W. FETZ 1,778,069

WOOD BLOCK FLOORING

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FIG. 1.

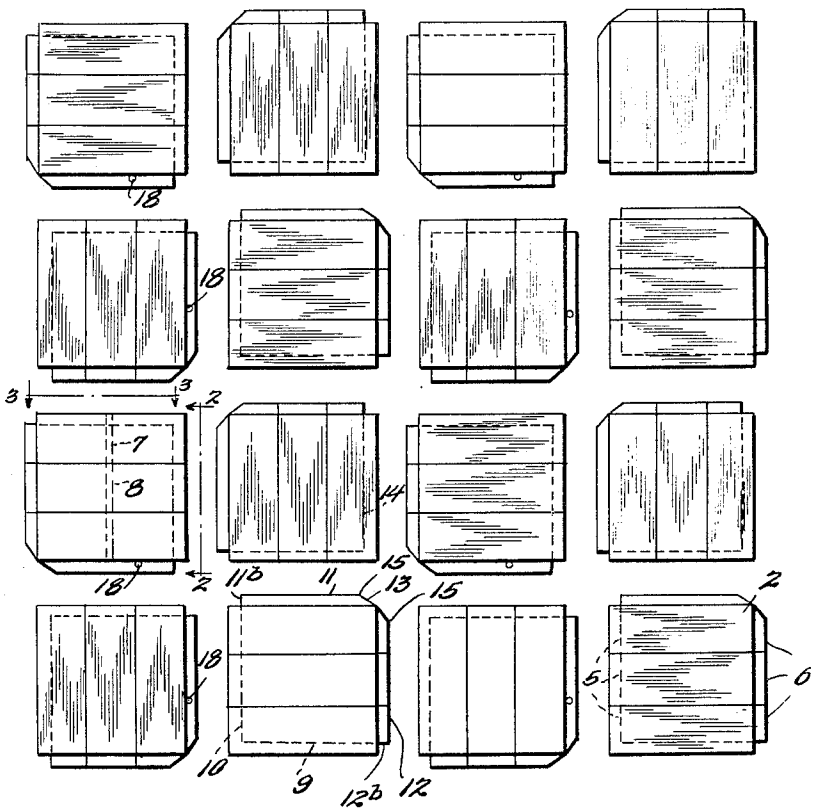


FIG. 2.

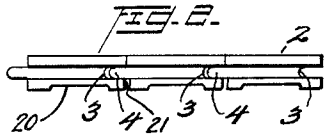
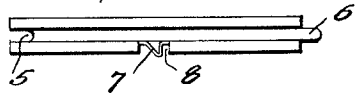


FIG. 3.



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FIG. 4.

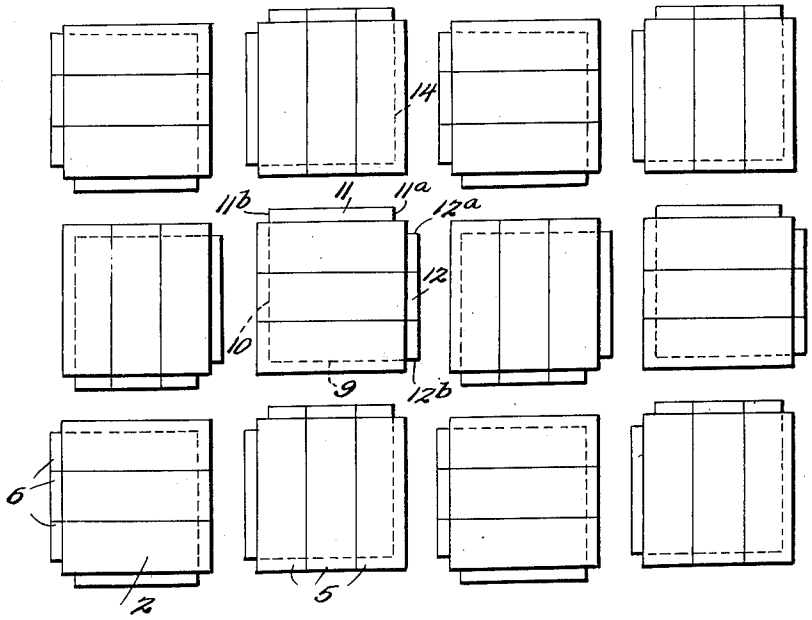
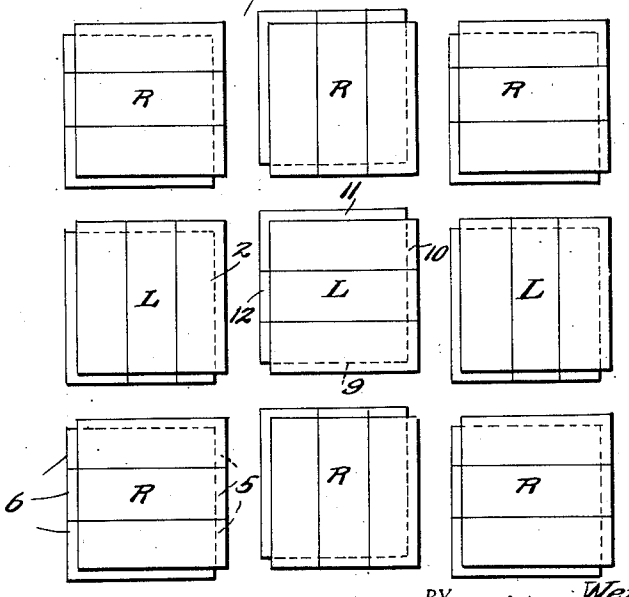


FIG. 5.



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Patented Oct. 14, 1930 1,778,069

UNITED STATES PATENT OFFICE

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WOOD-BLOCK FLOORING

Application filed March 7, 1928. Serial No. 259,874.

My invention relates to wood block flooring and has particularly in view the production of a fabricated block that can be laid without the use of slip tongues. In laying block flooring, slip tongues are used to join together adjacent blocks along those edges where a groove in one block is opposite the groove in the adjacent block. The elimination of slip tongues saves the cost of manufacturing the same, saves the labor of the floor-layer in putting them into place and in cutting them to proper length. In addition, the slip tongues get scattered over the floor, and thereby interfere with the fast operation of laying.

Referring to the drawings for a more complete disclosure of the invention:

Fig. 1 is a layout for two tongue-two groove blocks of a preferred form;

Fig. 2 is a front elevation of one of the blocks looking in the direction of 2—2 of Fig. 1;

Fig. 3 is a side elevation of one of the blocks looking in the direction of 3—3 of Fig. 1; and

Fig. 4 is a layout of a modified form for two tongue-two groove blocks; and

Fig. 5 is a layout of another modified form of two-tongue-two groove blocks.

In the manufacture of the fabricated block, I use short strips of flooring 2 with the grain running lengthwise and having a groove 3 along one longitudinal edge, into which fits the integral tongue 4 along the opposite edge of the adjacent strip. The underside of the flooring strips are provided with the customary "hollow back" 20, and there is the customary clearance or "relief" 21 between the strips. Before assembling the pieces to form the block, I cut a groove 5 on one end of each piece and on the other end I cut a tongue 6. The strips are then assembled and are securely held together to form a unitary block by any suitable means, that shown being a metal spline 7 forced into the groove 8 running transversely of the bottom of the block and as fully described and claimed in the application for patent of C. W. Allen, Serial No. 198,085, filed June 11, 1927.

When the fabricated block is assembled there is a groove 9 running lengthwise of the block and a groove 10 running crosswise. There is also a tongue 11 running lengthwise of the block and a tongue 12 running crosswise. The tongues, however, do not extend on either end the full length or width of the types of blocks shown in Figs. 1 and 4, for if they did it would be impossible to fit these blocks together in forming the floor. The end 11^b of the tongue 11 will be flush with the bottom of the groove 10 and the end 12^b of the tongue 12 will be flush with the bottom of the groove 9.

In the modification shown in Fig. 5, the floor is laid with what are known as right hand and left hand blocks, each block having, as heretofore described, two tongues and two grooves. In order to lay such blocks, it is not necessary to cut away the adjacent corners of the tongues, if the right and left hand blocks are laid in the proper relationship. To determine whether a block is a right or a left hand block, the observer should place it with the longitudinal groove 9 toward him. If the transverse tongue 12 is on the left side, it is a left hand block and if on the right side, it is a right hand block.

In Fig. 5, the right hand blocks are marked R and the left hand blocks are marked L. When laid as shown in Fig. 5, it will be noted that from top to bottom there are alternate horizontal rows of right hand and left hand blocks.

A diagonal cut 13 is made across the corner of the block shown in Fig. 1, where the tongues 11 and 12 meet and in order that there may be always sufficient clearance, the tongues are cut back a little from the diagonal along the end portions 15.

In the modification shown in Fig. 4, the tongue 11 is cut out, so that its end 11^a will be in line with the bottom of the groove 14 of the adjacent block, when the blocks are in assembled relationship. The tongue 12 will be cut out at its end 12^a, in a similar manner.

The blocks may be laid in position on the subfloor by means of a plastic cement, in which case it is not necessary to nail the blocks in position. If the blocks are laid on a wood

subfloor without a cement, then they should be nailed through the tongues on the outer side as at 18. Some of the advantages of this type of block are that by using solid tongues instead of slip tongues, the block is more rigidly held in the floor and the blocks are more firmly tied together. By using an integral tongue instead of the slip tongue, the squeaking area of the floor is reduced. The squeaking area is in direct proportion to the movable surfaces which are in contact with each other. By substituting a solid tongue for a movable one, the movable contacting surfaces are considerably diminished. Each block in the panel, being unsecured to the adjacent blocks, is free to move relative thereto. The tendency of such relative movement, due particularly to expansion and contraction on account of moisture absorption by the wood, is always present.

I am aware that the invention may be embodied in other specific forms without departing from the spirit of essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having thus described my invention, what I claim as new and useful and desire to secure by Letters Patent of the United States, is:

1. A floor block composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, the pieces being united along their longitudinal edges by a tongue and groove joint to form a unitary block, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue along the other longitudinal edge of the block and an integral tongue running across the grain and along the other transverse edge of the block, the tongue along the longitudinal edge of the block being shorter than the length of the block.

2. A floor block composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, the pieces being united along their longitudinal edges by a tongue and groove joint to form a unitary block, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue along the other longitudinal edge of the block and an integral tongue running across the grain and along the other transverse edge of the block, the tongue along the transverse edge of the block being shorter than the width of the block.

3. A floor block composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, the pieces being united along their longitudinal edges by a tongue and groove joint to form a unitary block, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue along the other longitudinal edge of the block and an integral tongue running across the grain and along the other transverse edge of the block, the tongues along the longitudinal and transverse edges of the block being shorter than the length and width of the block respectively.

4. A floor block composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, the pieces being united along their longitudinal edges by a tongue and groove joint to form a unitary block, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue along the other longitudinal edge of the block and an integral tongue running across the grain and along the other transverse edge of the block, the tongues along each edge of the block terminating short of the other edge.

5. A rectangular floor block composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, the pieces being united along their longitudinal edges by tongue and groove connection to form a unitary block, means for holding the pieces in assembled relationship, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue along the other longitudinal edge of the block, an integral tongue running across the grain and along the other transverse edge of the block, the tongues along each edge terminating short of the other edge of the block to an extent substantially equal to the depth of the grooves.

6. A flooring block composed of a plurality of pieces united along their edges by a tongue and groove joint and having two integral tongues at an angle to and adjacent each other, the adjacent portions of the tongues being cut away.

7. A flooring block composed of a plurality of pieces and having two integral tongues at an angle to and adjacent each other, the adjacent portions of the tongues being cut away diagonally.

8. A panel made of blocks composed of a plurality of pieces of wood with the grain running lengthwise of the pieces, means for holding the pieces in assembled relationship, a groove along one of the longitudinal outer edges of the block, another groove running across the grain and along one of the transverse outer edges of the block, an integral tongue running across the grain and along the

other transverse edge of the block, an integral tongue along the other longitudinal edge of the block, a portion of the adjacent tongues in the panel being cut away to permit assemblage of the blocks to form said panel, the blocks in the panel being free to move relative to each other.

9. A panel made of blocks composed of a plurality of pieces of wood and having two integral tongues adjacent each other, a portion of the adjacent tongues in the panel being cut away to permit assemblage of the blocks to form said panel, the blocks in the panel being free to move relative to each other.

10. A panel made of blocks composed of a plurality of pieces of wood provided with hollow backs, each block having two grooves adjacent each other, and two integral tongues adjacent each other, an end of a tongue in each block terminating short of the edge of the block to permit assemblage of the blocks to form said panel, the blocks in the panel being free to move relative to each other.

In testimony whereof, I affix my signature.

WERNER FETZ.