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HARDWOOD BLOCK FLOORING

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Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

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This invention relates to a flooring composed of a plurality of blocks which may be of wood or other suitable material. The object of the invention is to provide a block flooring in which each block will be firmly retained in its place by adjacent blocks.

Another object is to provide a flooring in which at least two edges of each block will be kept from upward movement by adjoining blocks.

Another object is to provide a flooring which may be readily laid.

Another object is to provide a flooring in which the blocks may be readily and economically manufactured.

Another object is to provide flooring blocks which will, when laid, not necessitate the use of keys, pins, or other pieces to retain the blocks in position.

Another object is to provide a flooring composed of interlocking blocks, the lower surfaces of which engage the flooring base throughout substantially its entire extent.

Other objects will hereinafter appear.

The invention will be better understood from the description of one practical embodiment thereof illustrated in the accompanying drawing in which:

Fig. 1 is a plan view of a section of floor composed of blocks embodying the present invention;

Fig. 2 is a transverse section thereof on the line 11—11 of Fig. 1;

Figs. 3, 4 and 5 are, respectively, plan, side and elevational views of one of the forms of blocks used in the flooring;

Figs. 6, 7 and 8 are, respectively, views similar to Figs. 3, 4 and 5 of the other form of blocks; and

Fig. 9 is a view similar to Fig. 2 but showing a modified form of joint.

The block flooring is laid upon a suitable base or sub-flooring and held thereto by an adhesive or cement 2. The blocks are illustrated as of rectangular shape and arranged in zig-zag or herring bone design, in which the ends of each block abut the sides of other blocks adjacent their ends.

In the flooring illustrated, two shapes of blocks 3 and 4 are used. Those, 3, slanting upwardly and to the right in the plan, are hereinafter referred to as "right hand" blocks, and are illustrated in Figs. 3, 4 and 5. Those, 4, extending upwardly and to the left in Fig. 1 are hereinafter referred to as "left hand" blocks and are illustrated in Figs. 6, 7 and 8.

As shown in Figs. 3 to 5, each right hand block consists of a rectangular top 5 and a bottom 6 parallel thereto and of substantially the same length and breadth but offset to the left and downwardly, as illustrated in the plan, from the top.

Along the side edges of the bottom, grooves 85 are provided so that there will be a slight space between the edges of adjacent blocks at their bottoms, into which the adhesive material, by which they are secured to their base, may flow. The ends and sides of the block are plain surfaces, oblique to the top and bottom and, as illustrated, each form an angle of about 70° therewith, and it will be noted when the block is placed with its longest dimension extending upwardly, and one side 8 projecting from under the top to the left, the lower end 9 also projects beyond the top, and the upper end 10 and right hand side 11 recede under the top by the same amount.

The block illustrated in Figs. 6 to 8 is substantially the same as that just described except that the arrangement of projecting sides and ends is reversed, so that when the block is viewed in plan, with the left hand side 8 projecting beyond the top, the upper end 10 also projects therebeyond, and the lower end 9 and right hand side 11 recede thereunder.

With blocks made as described, a pattern of zig-zag or herring bone design may readily be laid, all right hand blocks extending in one direction and all left hand blocks in a direction perpendicular thereto, as shown in Fig. 1, and the projecting side and end of each block will fit against the receding side and ends of three adjacent blocks, and be firmly held therebeneath.

Each block is sufficiently rigid not to bend or warp and by being held along two sides is firmly held in place by the overlapping parts of adjacent blocks, so that no securing means, other than the adjacent blocks and the adhesive between the block and base, are necessary. By eliminating the necessity for separate keys or the like to join the blocks, the expense of both manufacturing and laying the floor is materially reduced.

As the base of the blocks is the same area as their tops, with the exception of grooves
and as these grooves can be made as small as desired, the blocks transmit any pressure imposed upon them to their base throughout the maximum bearing area. The space into which the adhesive material may flow may be made as small as desired, so that while allowing for the flowing of an excess of this material, no large amount thereof will be wasted.

Obviously, my invention is applicable to other floor coverings than those composed of wooden blocks, for instance, to coverings of such materials as ceramic or rubber tiles, or it may be used to cover walls or other surfaces. Also the blocks need not be rectangular in shape but may be in the form of oblique parallelograms or any other desired form.

The finished flooring presents a pleasing appearance such as has heretofore been possible only with elaborately jointed blocks, manufactured and laid with excessive labor at great expense.

In Fig. 9 I have shown a joint at 12 between two blocks, in which the side and end surfaces, instead of being oblique, are cut in the form of a step. As in the form above described, the base of the block projects beyond its top along one side and end and recedes thereunder to the same extent along the others, the projecting side and end of one block engaging and fitting beneath the receding side and ends of others.

While I have described the illustrated embodiments of my invention in some particularity, obviously many variations thereof will occur to those skilled in the art to which it appertains, and I do not, therefore, limit myself to the specific details shown and described, but claim as my invention all embodiments, variations and modifications thereof coming within the scope of the appended claims.

I claim:

1. A flooring comprising a plurality of blocks, each having an elongated rectangular top and base of substantially the same dimensions, the base projecting beyond the top along one side and one end and receding under the other side and end, the relative arrangement of sides and ends beyond which the base projects being reversed in some of the blocks to that in the others.

2. A flooring comprising a plurality of blocks, each having an elongated rectangular top and base of substantially the same dimensions, the base projecting beyond the top along one side and one end and receding under the other side and end, the relative arrangement of sides and ends beyond which the base projects being reversed in some of the blocks to that in the others, the projecting portions of the base underlying and being held in place by the projecting portions of the tops of three adjacent blocks.

3. A flooring comprising a plurality of blocks, each having a rectangular top and base of substantially the same dimensions, the base projecting beyond the top along one side and one end and receding under the other side and end, the relative arrangement of sides and ends beyond which the base projects being reversed in some of the blocks to that of the others.

4. A flooring comprising two series of blocks laid in parallel rows, the blocks of one series being parallel to each other and oblique to the rows, the blocks of the other series being parallel to each other and oblique to the rows and angularly disposed to the blocks of the first series and each block having its base projecting beyond its top along one side and one end, the relative arrangement of the projecting sides and ends of the blocks of one series being the reverse of said arrangement in the other series, the sides and ends being plane throughout substantially their entire height, the projecting portions extending beneath the tops of and retained in place by adjacent blocks.

5. A flooring comprising two series of blocks laid in parallel rows, the blocks of one series being parallel to each other and oblique to the rows, the blocks of the other series being parallel to each other and oblique to the rows and angularly disposed to the blocks of the first series and each block having its base projecting beyond its top along one side and one end, the relative arrangement of the projecting sides and ends of the blocks of one series being the reverse of said arrangement in the other series, the projecting portions extending beneath the tops of and retained in place by adjacent blocks, each block having grooves at the side edges of its base, and adhesive securing the blocks to a supporting base and entering said grooves.

6. A flooring comprising two series of blocks laid in parallel rows, the blocks of one series being parallel to each other and oblique to the rows, the blocks of the other series being parallel to each other and oblique to the rows and angularly disposed to the blocks of the first series and each block having its base projecting beyond its top along one side and one end, the projecting side being retained beneath the receding side of one block of the same series and the receding ends of the block of the other series and the projecting end being retained beneath the receding side of a block of the other series.

7. A flooring comprising two series of blocks laid in parallel rows, a base supporting the blocks an adhesive between the blocks and the base, the blocks of one series being parallel to each other and oblique to the rows, the blocks of the other series being
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ing parallel to each other and angularly dis-
posed to the blocks of the first series and
each block having its base projecting beyond
its top along one side and one end, the rela-
tive arrangement of the projecting sides and
ends of each block of one series being the
reverse of the arrangement of said side and
end in the other series, the projecting por-
tions extending beneath the tops of and
solely retained in place by adjacent blocks
and by the adhesive.

In testimony whereof I hereunto affix my
signature this 31 day of August, 1926.

JAMES ORR FULTON.