

No. 741,100.

PATENTED OCT. 13, 1903.

J. J. BLACKMAN.
SURFACE FINISH FOR FLOORS, &c.
APPLICATION FILED DEC. 15, 1902.

NO MODEL.

Fig. 1.

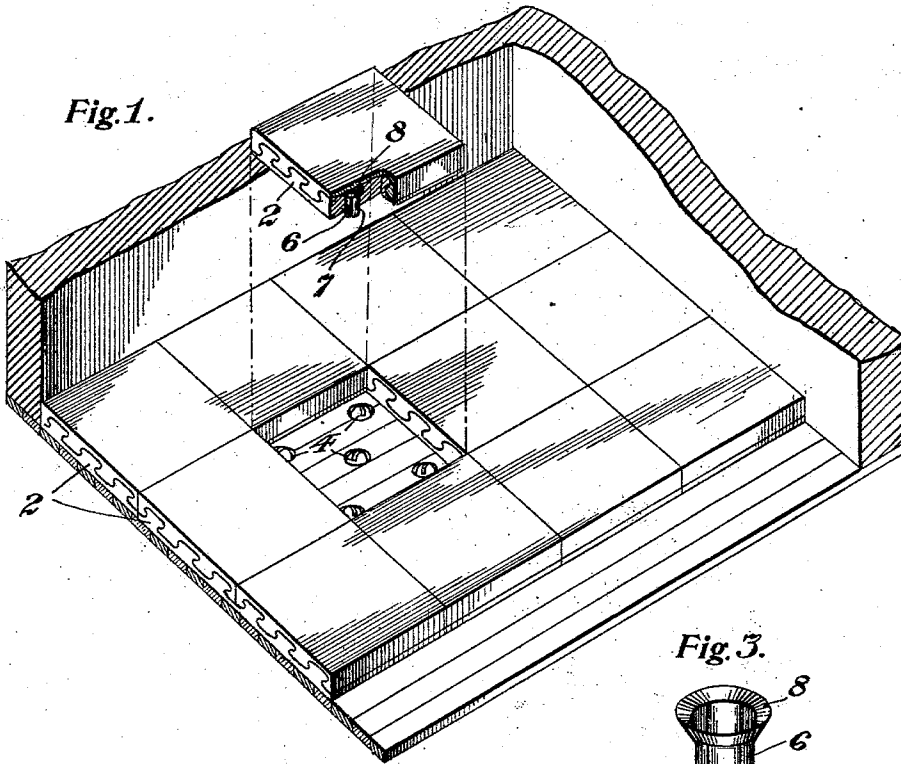


Fig. 3.

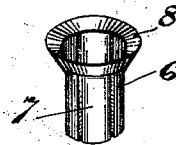


Fig. 4.

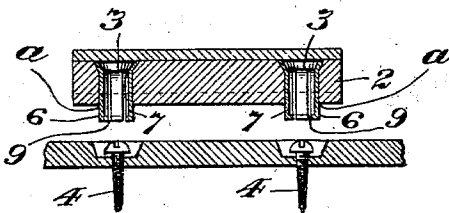


Fig. 2.

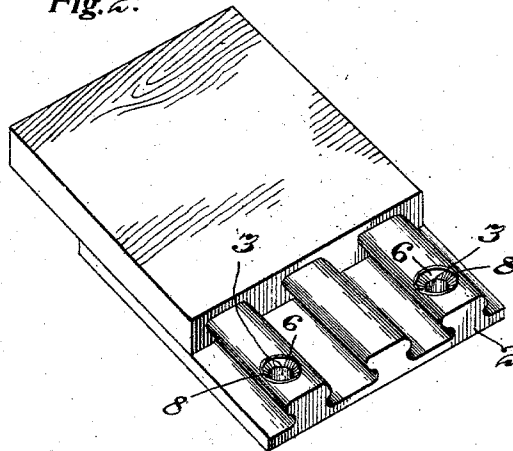
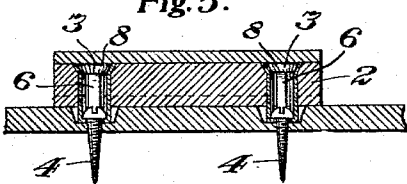


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN J. BLACKMAN, OF NEW BRITAIN, CONNECTICUT.

SURFACE FINISH FOR FLOORS, &c.

SPECIFICATION forming part of Letters Patent No. 741,100, dated October 13, 1903.

Application filed December 15, 1902. Serial No. 135,215. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. BLACKMAN, a citizen of the United States, residing in New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Surface Finish for Floors, &c., of which the following is a specification.

This invention relates to structural material, more particularly to parquetry or surface finish for floors, ceilings, &c.

The primary object of the present invention is the provision, in connection with a surface member or finish, preferably of a block or plate formation, having ribs or projections interlocking with another block or plate having grooves for the reception of such ribs or projections, means to facilitate the laying of any or all of such blocks or plates, and especially the center or last block of a series, and is in the nature of an improvement in part upon that shown and described in my application, Serial No. 43,141, filed January 14, 1901, and in my Patent No. 683,009, dated September 17, 1901.

A further object of the invention is the provision of a block, such as those described in my said application and patent, with means whereby the fastening devices, such as screws, may be first located in an underflooring and the blocks then pressed down upon the heads of such screws and held firmly and rigidly in position.

A further object of the invention is the provision of means whereby after the floor or other structure is laid or finished any block may be readily taken up and a new block relaid.

The block shown in my said application and patent and as herein shown comprises in a general way a base or under block and a surface or top block interlocked together by a series of tongue-and-groove or dovetail joints of any desired shape or conformation—that is to say, they may be of wedged or stepped or zigzagged or ogee shape or any other shape that will interlock the two portions or sections of such block together, such blocks as shown in my application and patent, and in the present instance having their base and top of the same dimensions. The

means, however, which I provide to facilitate the placing of the blocks in position may be used with various forms of blocks and with various forms of bases, whether they are or are not of the same dimension as the tops, and is adapted for use in connection with a block of any construction comprising a base and a top, one sliding on or movable relative to the other. In the form shown for the purposes of illustration the base and top are provided with a series of tongues and grooves shown of ogee form, the base being of the same formation and dimension as the top. While these tongues and grooves will hold the two portions of the block against displacement relative to each other, they do not prevent (when the block is made of wood) the warping or buckling of the top. Consequently the top and bottom are assembled in the particular manner pointed out in my prior application—that is to say, the top and base block should be so assembled that the grain of the top will cross or run transversely of the grain of the bottom or base, so that when the two blocks are interlocked one will act to restrain the other against warping or buckling, and consequently all possibility of the thimbles moving lengthwise within openings.

In laying the majority of the blocks of the floor or other structure it is obvious that the bases can be readily secured in position and the tops slid in position; but the last block, if it should be the center one or one surrounded by others or a row adjacent to the wall or base-board, cannot be laid in this manner, since the top cannot be slid on. Moreover, after the blocks are laid should the top of any one of them become chipped or broken or marred it can be easily pried up; but when it is desired to substitute another block for it there is no way of doing so except by the removal of a sufficient number of blocks to form a passage-way to an open space—such, for instance, as a door—so that the top of each successive block may be slid off. To overcome these disadvantages, I provide means which will permit any block—such as a center block or one surrounded by others or those adjacent to the wall, pillar, or base-board—to be laid without the necessity of removing the tops or

be replaced without the removal of the tops of other blocks and yet be firmly and rigidly held in position.

In the drawings accompanying and forming part of this specification, Figure 1 is a perspective view of a corner of a room completely laid with blocks and illustrating the manner of laying the last block of a series, which is shown with a portion broken away. Fig. 2 is a perspective view of one form of this block with the top partly removed. Fig. 3 is a view of a device adapted for use in connection with a block such as herein shown and described. Fig. 4 is a view of a part of the underflooring with the fastening-screws in position and the block, comprising a top and base, ready to be laid on the underflooring; and Fig. 5 is a view of such block laid in position.

Similar characters of reference indicate corresponding parts in the different figures of the drawings.

The base 2 of each of the blocks is provided with means, such as holes 3, for the fastening devices, such as screws 4; but in order that the base may be held in position by such devices it has heretofore been necessary to remove the top or facing plate 5 from the base, so as to insert the screws. In order to do away with this requirement, I provide each of the screw-holes with what I have herein termed a "locking" or "clamping" device, comprising in one form thereof (herein shown and described) a thimble or cylindrical member 6, adapted for insertion into each of the screw-holes and constructed to fit or clamp around the head of the fastening device or screw. In the preferred form shown this thimble 6 comprises a slitted portion 7, preferably having a flange 8 at its upper end and an interiorly-located shoulder 9 at its lower end, the flange being provided to maintain the thimble in proper position in the hole of the base and prevent it from being drawn therethrough, while the slitted portion permits the spreading of the lower end of the thimble when the same is forced over the head of the screw, so that the shoulder on the interior thereof will, owing to the resiliency of the members 9, close around the under side of the head of the fastening device or screw, and thus hold the block in position on the screw.

In practice the block at the under side of its base will be countersunk at the point *a* to permit of the spreading of the split thimble around the head of the screw, or such thimble will project slightly beyond or below the under side of the base, so that the end of the thimble can spread as the block is pushed onto the head of the screw, the underflooring being countersunk around each screw to receive the projecting portions of the thimbles.

In practice many of the blocks can be laid by first screwing the bases in position and sliding the tops on in the usual manner; but

the center block or the block inclosed by a number of other blocks or the blocks adjacent to the wall or pillar cannot, for the reasons hereinbefore stated, be so laid; and in laying these blocks the tops are slid in position on the bases, the screws, of any desired number, five being preferable, having been first screwed into the underflooring, as shown in Fig. 1. The blocks are then pushed down, so that the heads of the screws will engage and spread the under ends of the thimbles and pass thereinto, whereupon the resiliency of the thimbles will return the split portions thereof, so that the heads of the screws will be grasped by the shoulders of such thimbles and hold the blocks firmly and rigidly in position. If for any reason any block should become cracked or split or in any way marred and it is desired to take it up, it is only necessary to split the top and remove such top, whereupon the screws can be removed by inserting a screw-driver through the openings of the thimbles from the tops thereof. The removal of this block will also permit the removal of some of adjacent blocks, so that if any of the others should be marred or injured the tops thereof can be replaced. In place of the block the top of which was split in removal a new block can be readily placed in position in the manner hereinbefore described. It will thus be seen that any block can be readily removed and replaced without the necessity of removing any of the other blocks, since it is only necessary to remove the marred or injured top of the block by splitting it and then unscrewing the base, reinserting the screws in the underflooring, and placing another block in position by pressing it down upon the tops of the screws.

It will be understood that the present improvement is not limited as to the particular structure of the thimble or the fastening means for holding such blocks in position or the particular character of the blocks, the gist of the invention being the provision of means adapted for use with a block having interlocking portions to facilitate the placing of such blocks in position and the removal thereof.

I claim as my invention—

1. A block, comprising a base and an interlocking top plate, said base having means for engaging a fastening device to secure the block in place, said means and fastening device being accessible and adapted for ready disengagement when the top plate is removed, but rendered inaccessible when the top plate is interlocked with the base.

2. A block, comprising a base and an interlocking top plate, the grain of one crossing the grain of the other, said base having means for engaging a fastening device to secure the block in place, said means and fastening device being accessible and adapted for ready disengagement when the top plate is removed, but rendered inaccessible when the top plate is interlocked with the base.

3. A wood-flooring section, comprising a

base adapted to be secured to a floor and a facing-plate independent of the base but corresponding in dimensions to the dimensions thereof and having the grain thereof crossing the grain of such base, the upper face of the base and the lower face of the facing-plate being formed to be interlocked with each other by sliding one upon the other, said base having means for engaging a fastening device to secure the block in place, said means and fastening device being accessible and adapted for ready disengagement when the facing-plate is removed, but rendered inaccessible when the facing-plate is interlocked with the base.

4. A wood-flooring section, comprising a base adapted to be secured to a floor and a facing-plate independent of the base but corresponding in dimensions to the dimensions thereof, the upper face of the base and the lower face of the facing-plate being formed to interlock with each other by sliding one upon the other, said base having means for engaging a fastening device to secure the block in place, said means and fastening device being accessible and adapted for ready disengagement when the facing-plate is removed, but rendered inaccessible when the facing-plate is interlocked with the base.

5. A block, comprising a base and a top plate, said members having interlocking dovetails, said base having means for engaging a fastening device to secure the block in place, said means and fastening device being accessible and adapted for ready disengagement when the top plate is removed but rendered inaccessible when the top plate is interlocked with the base.

6. A block, comprising a base and an interlocking top plate, said base having resilient means for engaging a fastening device to secure the block in place, said means and fas-

tening device being accessible and adapted for ready disengagement when the top plate is removed but rendered inaccessible when the top plate is interlocked with the base.

7. A block, comprising a base and an interlocking top plate, said base carrying a split thimble provided with a shoulder on the interior thereof for engaging the head of a fastening device to secure the block in place, said thimble and fastening device being accessible and adapted for ready disengagement when the top plate is removed, but rendered inaccessible when the top plate is interlocked with the base.

8. A block, comprising a base having a plurality of openings for the reception of a flange and split thimble having on the interior of its split end a shoulder, and an interlocking top plate, each of said thimbles adapted to spring around and engage a fastening device to secure the block in place, said thimbles and fastening devices being accessible and adapted for ready disengagement when the top plate is removed, but rendered inaccessible when the top plate is interlocked with the base.

9. The combination with an underflooring having a series of headed fastening devices located therein, of a block comprising a base and an interlocking top plate, said base having a plurality of clamping devices each adapted to engage one of said fastening devices to secure the block in place, said clamping and fastening devices being accessible and adapted for ready disengagement when the top plate is removed, but rendered inaccessible when the top plate is interlocked with the base.

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Witnesses:

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