

July 27, 1937.

J. R. GREENWAY

2,088,238

WOOD FLOORING

Filed June 12, 1935

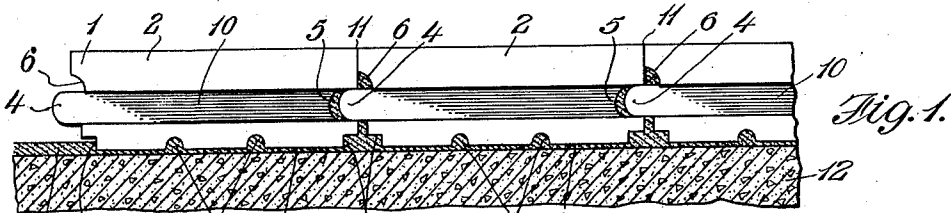


Fig. 1.

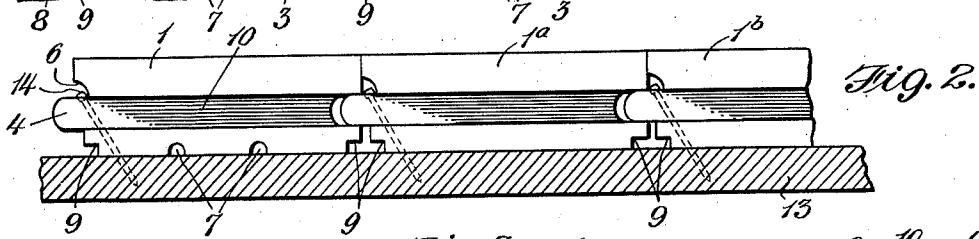


Fig. 2.

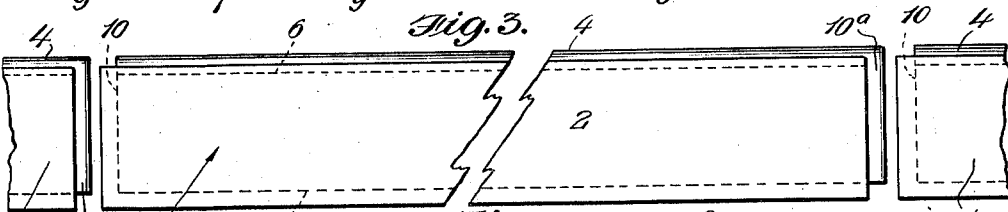


Fig. 3.

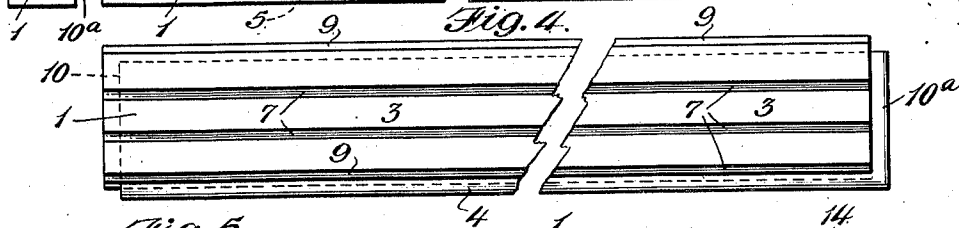


Fig. 4.



Fig. 5.

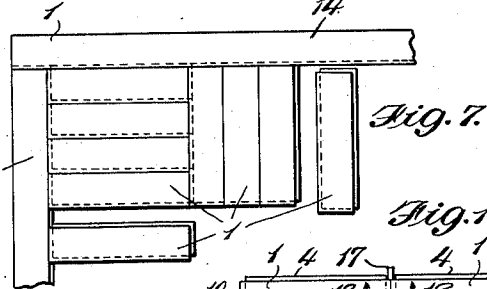


Fig. 7.



Fig. 6.

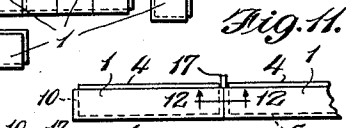


Fig. 11.

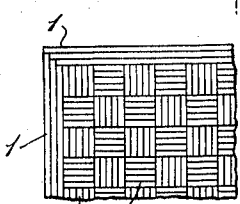


Fig. 8.

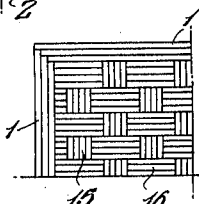


Fig. 9.

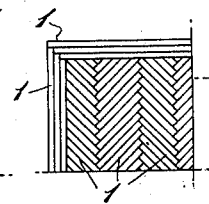


Fig. 10.



Fig. 12.

Inventor
J. Ray. Greenway,

Row & Row
Attorneys.

UNITED STATES PATENT OFFICE

2,088,238

WOOD FLOORING

J. Ray Greenway, Johnson City, Tenn., assignor
to Harris Manufacturing Company, Johnson
City, Tenn., a corporation of Tennessee

Application June 12, 1935, Serial No. 26,293

2 Claims. (Cl. 20-7)

The invention relates to wood flooring and has for its objects to provide certain new and useful improvements and advantages over wood flooring as heretofore designed.

5 A primary object of the invention is to provide a wood flooring, which may be constructed in random lengths and in which provision is made for interlocking the strips together either along their longitudinal or transverse edges or both.

10 A further object is to provide a wood flooring of the character described which is designed to be laid in mastic or nailed to the sub-floor. Provision is made in the flooring strips to accommodate the usual nails when the stock is thus secured to the sub-floor. In the event the flooring is laid
15 in mastic, the nail-receiving grooves serve as an extra mastic trap to prevent the mastic from working through to the upper surface of the flooring.

20 The flooring may be laid in any desired manner and in various patterns, for example regular strip pattern, single herringbone, french herringbone, squares, basket pattern, parquet or diamond blocks. When laying in regular strip pattern, the stock as it is shipped is laid end to end, and is cut off when necessary according to the pattern desired. The stock in one foot or two foot lengths may be shipped in bundles, and it has been found convenient to ship the stock in sixteen-foot bundles or longer. The stock when laid in this manner is termed "regular strip pattern in random lengths". Practically any desired pattern can be made in the floor without departing from the invention, it merely being necessary to cut the
30 strips to the desired lengths depending upon the nature of the floor to be laid.

A preferred form of the invention consists of a pattern known in the trade as "flat back", with or without one or more relatively small channels in the under surface to anchor the flooring in mastic, and the flooring strips also contemplate a mastic or relief groove on each side of the strip on the under surface thereof, also for the purpose of accommodating excess mastic between the flooring strips. As above explained, said strips are
40 locked together by the usual tongue and groove connections at their sides or ends, and the improvements are particularly desirable in laying oak and all kinds of wood floors.

50 The invention results in a flooring which satisfactorily meets trade requirements in preventing buckling or leakage of mastic to the upper surface of the flooring. When the tongue and groove connections are present at the ends of the flooring strips, the latter will be cut to specified lengths

prior to shipment and laying. When the tongue and groove connection is present at the longitudinal edges of the strips, and in the absence of a specified pattern, the said strips may be cut
5 in random lengths.

In addition to the general objects recited above, the invention includes among its objects such other improvements and advantages in construction and arrangement as are found to obtain in the article hereinafter described or claimed.

In the accompanying drawing, forming a part of this specification, and showing, for purposes of exemplification, a preferred form and manner in which the invention may be embodied and practiced, but without limiting the claimed invention specifically to such illustrated instance or instances:

Fig. 1 is a view in end elevation of a plurality of interlocked flooring strips constructed in accordance with the invention, said strips being illustrated as laid in mastic on a concrete or other desired sub-flooring.

Fig. 2 is a similar view showing the said strips applied to a wood sub-floor.

Fig. 3 is a top plan view of one of the flooring strips in block or random lengths, being shown broken away and illustrating the manner of assembling a plurality of strips end to end when laying the floor in regular strip pattern using random lengths.

Fig. 4 is a bottom plan view of one of the strips shown in Fig. 3.

Fig. 5 is a bottom plan view broken away of a modified form of flooring strip.

Fig. 6 is an edge view of the same.

Fig. 7 is a top plan view of a section of flooring illustrating one manner of laying the strips when the latter are cut to specified lengths.

Figs. 8, 9, and 10 are similar views on a reduced scale, showing various patterns of flooring for which the present improved strip is adapted.

Fig. 11 is a detail plan view on a reduced scale and showing the manner of assembling the strips end to end when two grooves are adjacent one another at the abutting ends of the strips.

Fig. 12 is an enlarged detail vertical section on line 12-12 of Fig. 11.

Referring to the drawing, the flooring strip is indicated at 1 and comprises a smooth top surface 2 and a lower or bottom surface 3. A tongue 4 is provided along one longitudinal edge of each strip and a groove 5 along the opposite edge. A nailing groove 6 is provided along one edge of the strip preferably immediately above the tongue 4. One or more longitudinal mastic channels 7

are or may be provided along the bottom of each strip to anchor the same in mastic material indicated at 8. Additional mastic or relief grooves 9 are preferably provided along the bottom longitudinal edges of the strips to accommodate excess mastic beneath the tongue and groove connections when the strips are interlocked and united in laying the flooring. The provision of the meeting grooves 9 accommodates the mastic and tends to prevent the same from seeping to and between the upper surface 2 of the adjacent blocks.

In the embodiment illustrated in Figs. 1 to 4, the end of the strip is provided with a groove 10 to accommodate a corresponding tongue 10a on an adjacent strip laid end to end with said first mentioned strip, for example in laying a floor in regular strip pattern in specified or random lengths.

As best seen in Fig. 1 the longitudinal and end grooves 5 and 10 are preferably slightly deeper than the tongues 4 and 10a of adjacent strips so as to insure tight meeting of the strips along the meeting lines 11. This clearance between the tongue and groove connections also may accommodate excess mastic as shown in Figs. 1 and 2.

When the strips are laid in mastic on a concrete or other subfloor 12, as shown in Fig. 1, the nailing grooves 6 serve to accommodate excess mastic which may seep upwardly from meeting relief grooves 9 through the space provided by the tongue and groove connections. The amount of this mastic is such as to render it practically certain that there will not be sufficient excess to fill the grooves 6, and thence seep upwardly to the top surface of the adjacent strips.

In Fig. 2 the strips are illustrated as laid on a wooden or other sub-floor 13, in which event as succeeding courses of strips are laid, nails 14 are driven diagonally downwardly into the nailing grooves 6 on the strips to securely anchor the same to the sub-flooring 13.

In Fig. 2 the strip or block 1 is illustrated as provided with the outer mastic or relief grooves 9 and intermediate small channels or other mastic grooves 7. The grooves 7 are not essential in the blocks, particularly when the same are nailed to a wooden or other subfloor 13, and therefore the strips 1a and 1b in Fig. 2 are illustrated as omitting said intermediate channels 7. The outer relief grooves 9 are preferably present regardless of whether the strips are laid in mastic or nailed to a wood subfloor. It will be noted that the heads of the nails 14 are accommodated within the nailing grooves 6 so as not to interfere with the tight meeting of the adjacent courses of strips 1.

In Fig. 7 the strips 1 are preferably cut to specified uniform lengths and may be of the form illustrated in Figs. 3 and 4 having side tongues 4 only and grooves 5 along their opposite longitudinal edges, or the same may be of the character shown in Figs. 5 and 6 having side tongues 4 and end tongues 10a. In either event, the strips are or may be laid as illustrated to nest within outer marginal tongue or groove strips 14 defining the pattern formed by the smaller strips 1 of uniform length.

In Fig. 8 the strips 1 are laid in the form of parquet squares to provide an attractive design of flooring.

In Fig. 9 a basketweave of the strips is illustrated, the same being obtained by cutting the strips in two lengths, which are laid to constitute

relatively small sections 15 and larger sections 16 disposed at right angles to the sections 15.

In Fig. 10 the single herringbone type of flooring is illustrated by the manner of assembling the strips 1. In this latter design the said strips are preferably provided with end tongues and grooves as well as side tongue and groove connections, to insure complete interlocking of the strips.

In laying the flooring in short lengths, for example parquet squares, basket weave or herringbone, these shorter strips may be grooved on both ends as distinguished from a tongue and a groove at opposite ends of the strips. Such an arrangement is illustrated in Figs. 11 and 12. A wood or other spline 17 or the like is inserted between and within the meeting grooves 10 in order to fasten the blocks or strips together. The provision of the short transverse splines 17 renders it unnecessary to provide a tongue on one end of these shorter strips when laying a flooring of the character described.

From the foregoing it will be apparent that the improved design of floor strips results in a smooth, unbroken flooring which may be constructed of oak, maple, or walnut or other hard woods, and in which flooring provision is made for complete interlocking of the strips of random or specified lengths and in which further provision is made for accommodating the nails when the strips are laid on a wooden subfloor, or for accommodating excess mastic when the strips are laid in the manner illustrated in Fig. 1.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

What is claimed is:

1. A wood flooring strip adapted to be laid in mastic and having a tongue and groove respectively along its opposite longitudinal edges to interlock with correspondingly tongued and grooved adjacent strips, said strip having substantial vertical abutting walls above said tongue and groove respectively to insure against the escape of mastic to the top surface of two interlocked strips, said strip having a mastic channel extending along its bottom surface and relief grooves at the opposite side edges of said bottom surface, and a nailing channel disposed along the tongued edge of the strip above said tongue, said edge grooves being deeper than the width of the tongues to provide clearance to insure close meeting of the strips, said nailing channel completely overhanging an inserted nail to insure unobstructed engagement of the strip with an adjacent strip, and said nailing channel accommodating excess mastic to prevent the same from seeping through to the top surface of adjacent strips.

2. A parquetry wood flooring consisting of a plurality of interlocked strips each having a tongue and groove respectively along its opposite edges to interlock with correspondingly tongued and grooved adjacent strips, each of said strips having substantial vertical abutting walls above said tongue and groove respectively to insure against the escape of mastic to the top surface of two interlocked strips, said strips each having a mastic channel extending along its bottom sur-

face and relief grooves at the opposite side edges of said bottom surface, and a nailing channel disposed along the tongued edge of the strip above said tongue, said edge grooves being deeper
5 than the width of the tongues to provide clearance to insure close meeting of the strips, said nailing channel completely overhanging an in-

serted nail to insure unobstructed engagement of the strip with an adjacent strip, and said nailing channel accommodating excess mastic to prevent the same from seeping between the strips to the top surface of the flooring.

J. RAY GREENWAY.