Jan. 6, 1931. J. L. McWILLIAMS 1,788,315

FLOOR LAYING DEVICE

Filed March 30, 1929

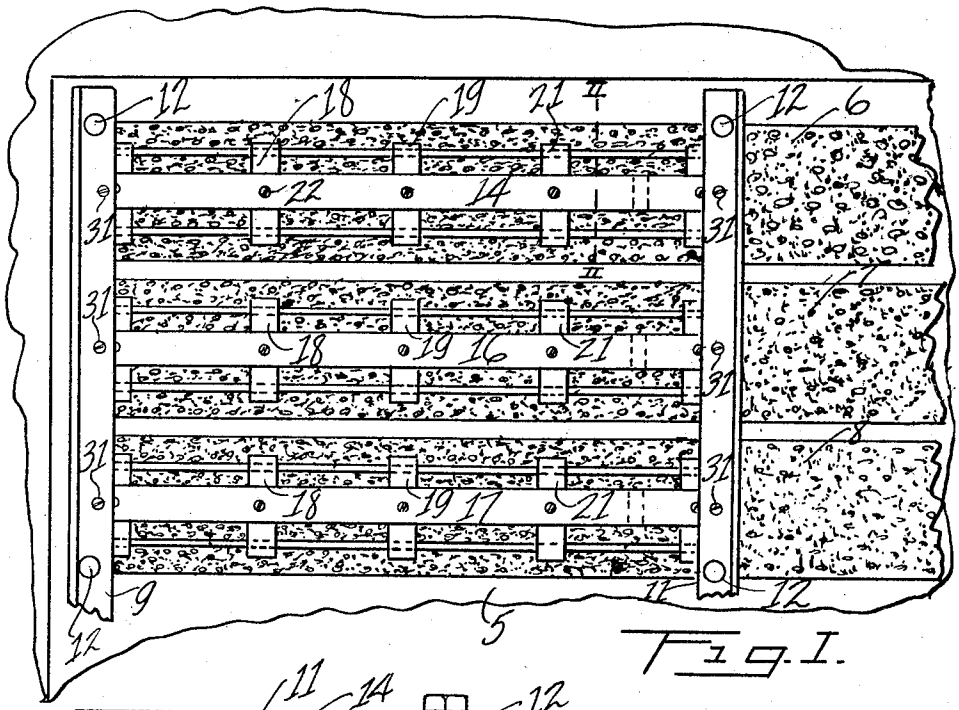

Fig. I.

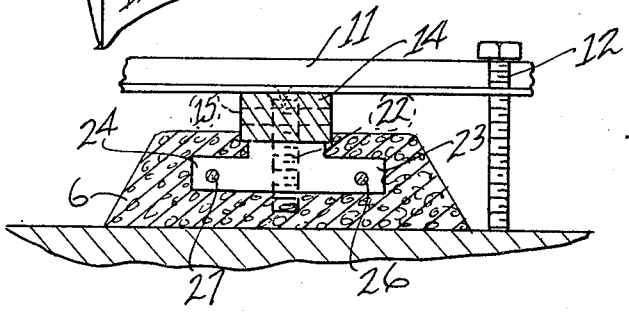

Fig. II.

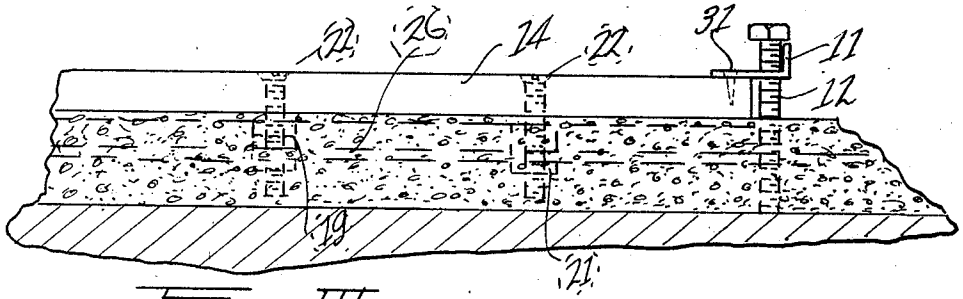

Fig. III.

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UNITED STATES PATENT OFFICE

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FLOOR-LAYING DEVICE

Application filed March 30, 1929. Serial No. 351,153.

This invention relates to improvements in floor laying devices and has particular reference to means for laying sleepers or like fasteners to which wood floor, carpets or other materials are to be secured.

The principal object of this invention is to provide means whereby wooden sleepers may be tightened after being laid in a plastic composition.

Another object is to produce a device wherein all of the sleepers or the like will be in parallel alignment.

A further object is to provide means whereby the carrying blocks upon which the sleepers are secured, are rigidly anchored to the plastic supporting means.

A still further object is to provide an economical structure to accomplish the above features.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a plan view of one section of my invention, showing the same previous to the embedding in the plastic support,

Figure 2 is an enlarged detail cross section taken on the line 2—2 of Figure 1, and

Figure 3 is an enlarged detail side elevation of Figure 2.

In order to lay a wooden floor upon a hollow tile, concrete base or other base not penetrable to nails, it is necessary to first position sleepers upon the base to which the floor boards are to be nailed. It is imperative that the sleepers be properly spaced and also leveled with respect to each other. It has been found from experience that when the sleepers are fastened to blocks embedded in the concrete and plastic material placed thereunder, as is sometimes done, the dampness of the concrete first swells the sleepers and after they dry out there is a space left between the sleepers and the supporting blocks and base with the result that a squeeky springy floor will be present. I have therefor provided means whereby after the sleepers have dried out the same may be tightened down upon the supporting blocks and base.

In the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates the floor of a building which may be of hollow tile, concrete or any other material. Upon this floor I first lay a series of parallel plastic strips as shown at 6, 7 and 8.

The numerals 9 and 11 refer to angle iron leveling bars which are leveled through the medium of screws 12. Suspended from the bars 9 and 11 are sleepers designated by the numerals 14, 16 and 17. These sleepers are preferably made of wood and have attached thereto at spaced intervals metal supporting blocks as shown at 18, 19 and 21. A screw 22 extends through each sleeper and into each block. The blocks are provided with wings 23 and 24 which serve to carry tie rods as shown at 26 and 27 respectively. These tie rods form and anchor in the plastic strips. The construction thus far described is laid upon the plastic strips and then forced downwardly into the plastic strips so that the same assumes the position shown in Figure 2. The result of this construction is that after the plastic material has been pointed up about the embedded portions and has hardened, the screws 31 are removed and the angle irons 9 and 11 are again employed in setting up the next section of sleepers. As soon as the sleepers and supporting base have dried the screws 22 are tightened, thus bringing the sleepers into intimate contact with their blocks and the base, thus producing a solid sleeper to which the floor boards may be nailed.

As illustrated to advantage in Figure 2, the numeral 15 designates an opening provided in the sleeper 14 that may serve either as a ventilating medium or as a means for the passing therethrough of conduits or the like.

It will thus be seen that I have produced a device which will accomplish all the objects above set forth.

It is to be understood that the form of my invention herewith shown and described is to

be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. In combination with a floor laying device comprising a pair of spaced parallel members having means for supporting said members at a predetermined height above a supporting surface, of sleepers secured to said parallel members, and suspended therebelow, and supporting members adjustably carried by said sleepers for the purpose specified.

2. In combination with a floor laying device comprising a pair of spaced parallel members having means for supporting said members at a predetermined height above a supporting surface, of sleepers secured to and below said parallel members, supporting members positioned beneath said sleepers, and means for adjusting said sleepers with relation to said supporting members.

3. In combination with a floor laying device comprising a pair of spaced parallel supporting members having adjustable means for supporting said members at a point above a fixed surface, of a plurality of sleepers carried by said parallel members, a plurality of supporting blocks threadedly secured to the undersurface of said sleepers for the purpose specified.

4. In combination with a floor laying device comprising a pair of spaced parallel supporting members having adjustable means for supporting said members at a point above a fixed surface, of a plurality of sleepers carried by said parallel members, a plurality of supporting blocks threadedly secured to the undersurface of said sleepers and means carried by said blocks for anchoring said blocks in a plastic composition.

In testimony whereof I affix my signature.

JOSEPH L. McWILLIAMS.