

Jan. 23, 1934.

H. DUSABLON

1,944,787

BUILDING CONSTRUCTION

Filed Dec. 7, 1932

2 Sheets-Sheet 1

Fig. 1.

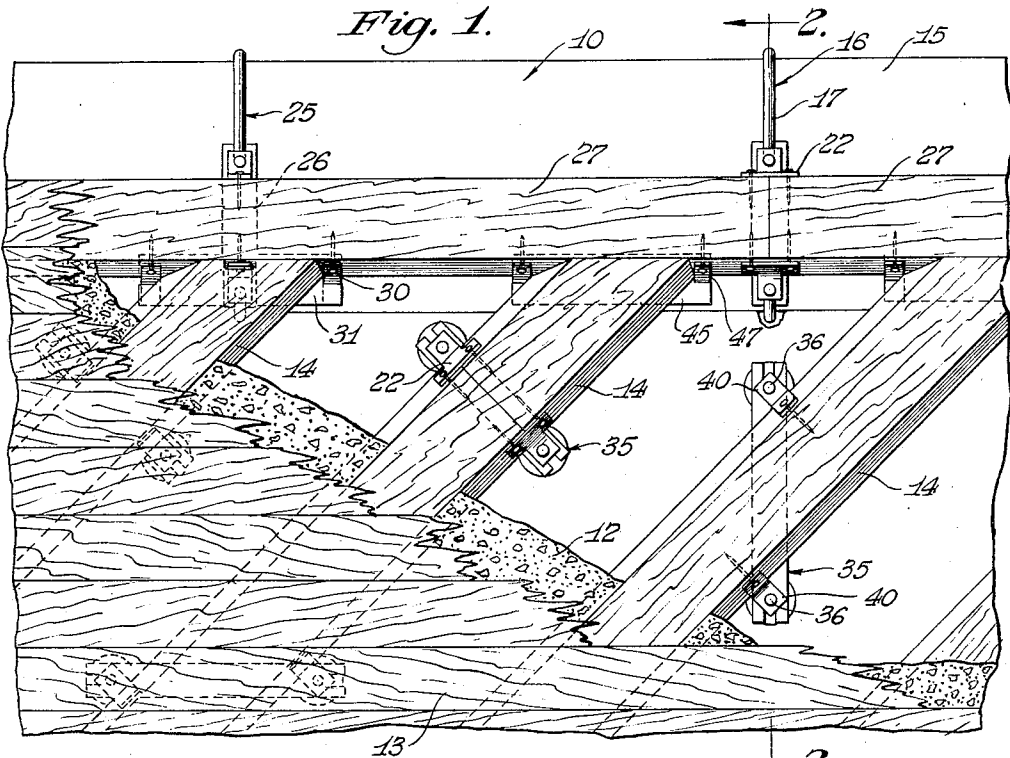
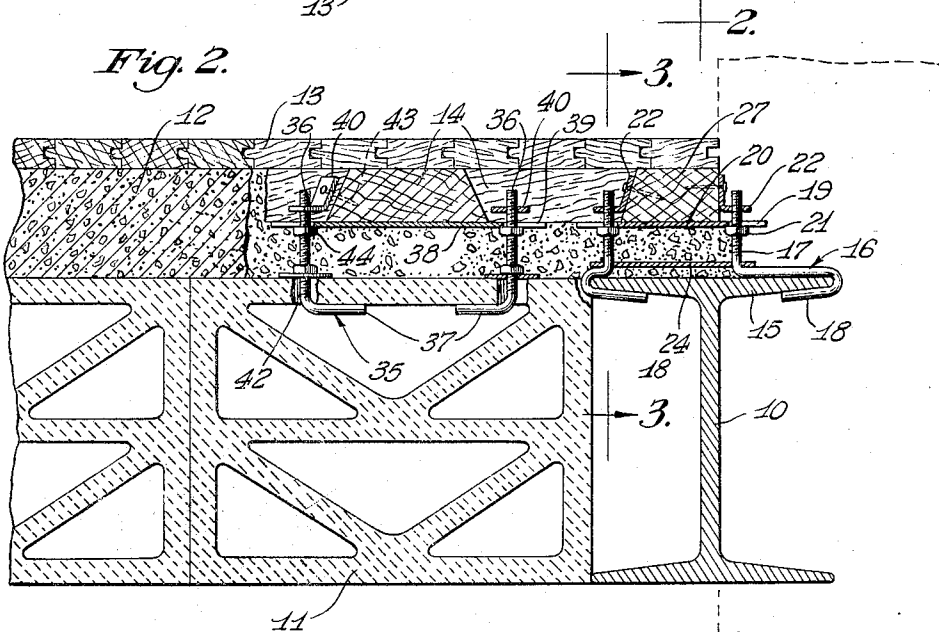


Fig. 2.



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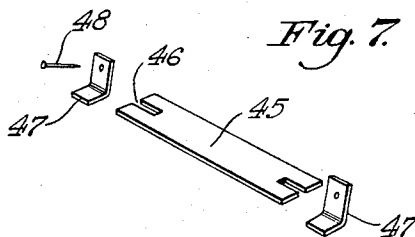
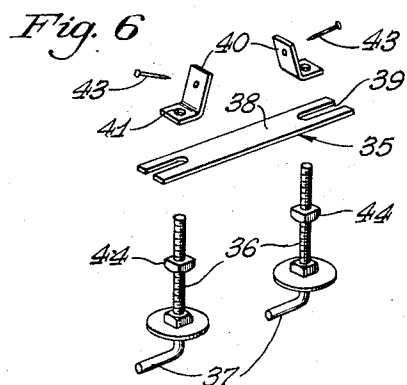
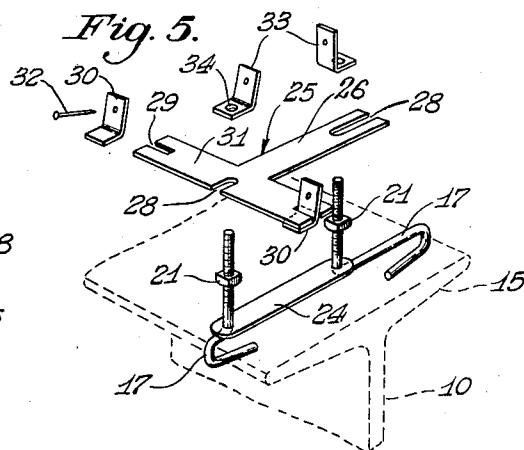
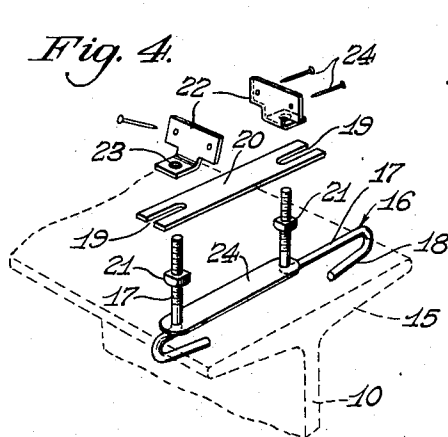
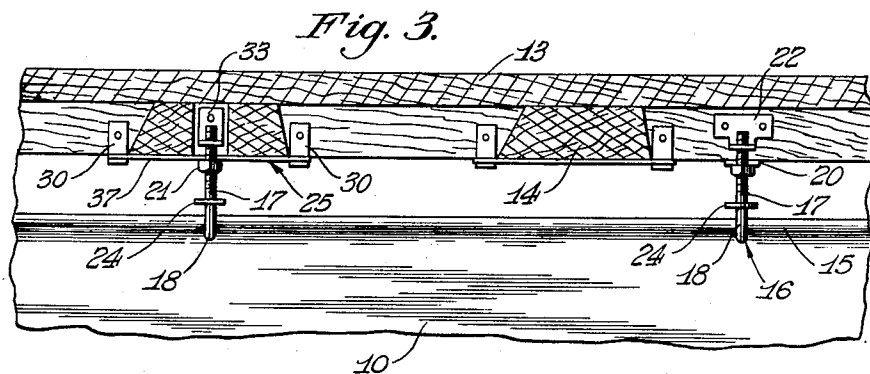
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

1,944,787

BUILDING CONSTRUCTION

Henry Dusablon, Chicago, Ill.

Application December 7, 1932. Serial No. 646,169

4 Claims. (Cl. 72-101)

This invention relates to certain novel improvements in building constructions, and has for its principal object the provision of an improved construction of this character which will be highly efficient in use and economical in manufacture.

This invention relates particularly to floor construction for steel framework buildings and especially to floors having a base of tile and concrete and a top flooring of wood; the sleepers upon which the top flooring is laid being embedded in the concrete. As at present practised in the art, after the tile floor base is laid the sleepers are shimmed up flush with each other by laying 2 x 4's on the tile below the sleepers. The use of these sleeper shims necessitate, in the construction of a building, the use of a relatively large supply of lumber, usually 2 x 4's, and a considerable part of which is wasted in cutting up and fitting the sleeper shims.

It is, therefore, an object of the present invention to eliminate the use of these sleeper shims and to provide adjustable clamping devices, carried by the tile floor base, for supporting the sleepers and adjusting them to a common horizontal level or uniform height so that the top flooring may be laid thereupon without shimming the sleepers.

Another object of the invention is to provide new and improved devices for tying or anchoring the leaders of the floor construction to the steel I beams of the framework.

The invention will be best understood by reference to the accompanying drawings, showing the preferred form of construction, and in which:

Fig. 1 is a top plan view of a floor section embodying the invention, with a part of the top flooring broken away to disclose the new anchoring devices;

Fig. 2 is a vertical sectional view on line 2-2 in Fig. 1;

Fig. 3 is a vertical sectional view on line 3-3 in Fig. 2;

Fig. 4 is a perspective detail view of one unit of the invention and consisting of a preferred form of the device employed for anchoring the floor construction to the I beams or steel framework of the building;

Fig. 5 is a perspective detail view of a modified form of the anchoring device shown in Fig. 4;

Fig. 6 is a perspective detail view of a device for anchoring the sleeper to the tile; and

Fig. 7 is a perspective detail view of the sleeper rest plates and attaching clips.

In the drawings, an I beam of the steel frame-

work of a building is indicated at 10; the tile floor base at 11; concrete overlying the tile base 11 at 12; the top or wooden flooring at 13; the sleepers at 14, and the leaders at 27.

In practising my invention I anchor the floor construction shown to the top flange 15 of the I beams by means of anchoring devices, a preferred form of said anchoring devices being generally indicated at 16. Each of these anchoring devices 16 includes a pair of anchor bolts 17 having angled end portions 18 adapted to clamp the top flange 15 of the I beam 10. These anchor bolts 17 are tied together by bars 24 and are projected through slots 19 formed in the end portions of leader rest bars 20. Each anchor bolt 17 carries a nut 21 bearing against the corresponding bar 20. The anchor bolts 17 are threaded through apertures 23 in clips 22 and these clips 22 are attached to the leaders 27 (Fig. 2) by means of fastening elements such as nails 24. The clips 22 are arranged to span the joints between adjacent leaders 27 (Fig. 1). In this manner the floor structure is anchored to the beams 10 of the steel framework.

Another anchoring unit for tying the leaders 27 to the beams 10 is illustrated in Fig. 5 and is generally indicated at 25. This unit 25 comprises the bolts 17 tied together by bars 24. In addition, the unit 25 includes a T shaped rest bar 26 having a leader rest portion 16 in which are provided slots 28 for the reception of the threaded portions of the anchor bolts 17. The T bar 26 includes a sleeper rest portion 31 in which are provided slots 29 for the reception of clips 30. These clips 30 are attached to the leaders 27 by nails 32. Other clips 33 are provided having threaded openings 34 therein for the reception of the threaded portions of the anchor bolts 17 and these clips 33 are also fastened to the leaders 27 by nails such as 32.

When the leaders 27 are thus anchored to the beams 10 the ends of the sleepers 14 rest upon the cross arms 31 of the T bars 26.

In practising the invention I also provide a unit, generally indicated at 35, (Fig. 6) for anchoring the sleepers 14 to the tile 11 and for adjusting the sleepers 14 vertically to a common level so that the flooring may be laid evenly and uniformly thereon.

This unit 35 includes two anchor bolts 36 having angled end portions 37; a sleeper rest bar 38 having slots 39 formed in its end portions; and clips 40 which are provided with threaded openings 41 for the reception of the anchor bolts 36. The threaded stems of the anchor bolts 36 are in-

serted through openings 42 in the tile 11, through the slots 39 in the sleeper rest bar 38, and are threaded through the openings 41 in the clips 40, so that the angled end portions 37 of the anchor bolts 36 abut the under side of the top wall of the tile 11, as shown in Fig. 2. The clips 40 are then attached to the sleepers 14 by means of fastening elements such as nails 43. The sleepers 14 are thus anchored to the tile 11. The under sides of the sleepers 14 bear against the bars 38 and the top or upper surface of the sleepers 14 may be made flush with each other, so that the wooden flooring 13 will lie evenly thereon, by adjusting the nuts 44, on the anchor bolts 36, which bear against the sleeper rest bars 38.

Another form of sleeper rest bar is indicated at 45, (Figs. 1 and 7). This bar 45 is provided in its end portions with slots 46 for the reception of clips 47 and these clips 47 are attached to the leaders 27 by nails 48.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is:

1. In concrete and tile floor construction for buildings having a steel framework, a supporting beam for the framework, leaders, and devices for anchoring the leaders to the supporting beam, each of said anchoring devices including a leader rest bar having slots formed therein, a pair of anchor bolts having threaded stems extended through said slots and having angled end portions adapted to clamp the beam, and clips attached to the leaders each having threaded openings formed therein for the reception of the threaded stems of the anchor bolts.

2. In concrete and tile floor construction for buildings having a steel frame work, the combination of a supporting I beam of the steel

framework, leaders, and devices for anchoring the leaders to the top flanges of the I beams, each of said devices including a rest bar having slots formed therein, a pair of anchor bolts having threaded stems extended through said slots and having angled end portions for clamping the top flanges of the I beams, and clips attached to the leaders and each having a threaded opening formed therein for the reception of the threaded stems of the bolts.

3. In concrete and tile floor construction for buildings having a steel framework, the combination of a supporting I beam of the steel framework, leaders, and devices for anchoring the leaders to the top flanges of the I beams, each of said devices including a T shaped rest bar including a stem providing a leader rest and having slots formed therein, a pair of anchor bolts having threaded stems extended through said slots and having angled end portions for clamping the top flanges of the I beams, each of said bars including a cross arm providing a sleeper rest, and having slots formed in its end portions, and clips extended through the second-named slots and attached to the leaders.

4. In concrete and tile floor construction, the combination of sleepers, tile, and devices for adjustably anchoring the sleepers to the tile, each of said devices including a sleeper rest bar having slots formed therein, a pair of anchor bolts having threaded stems extended through the top wall of the tile and through said slots and having angled end portions extended under the top wall of the tile, and clips attached to the sleepers having threaded openings formed therein for the reception of said stems.

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