Aug. 13, 1940. W. MOESLY 2,211,667

JOIST AND STRUCTURAL CONNECTIONS THERETO

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Fig. 1.

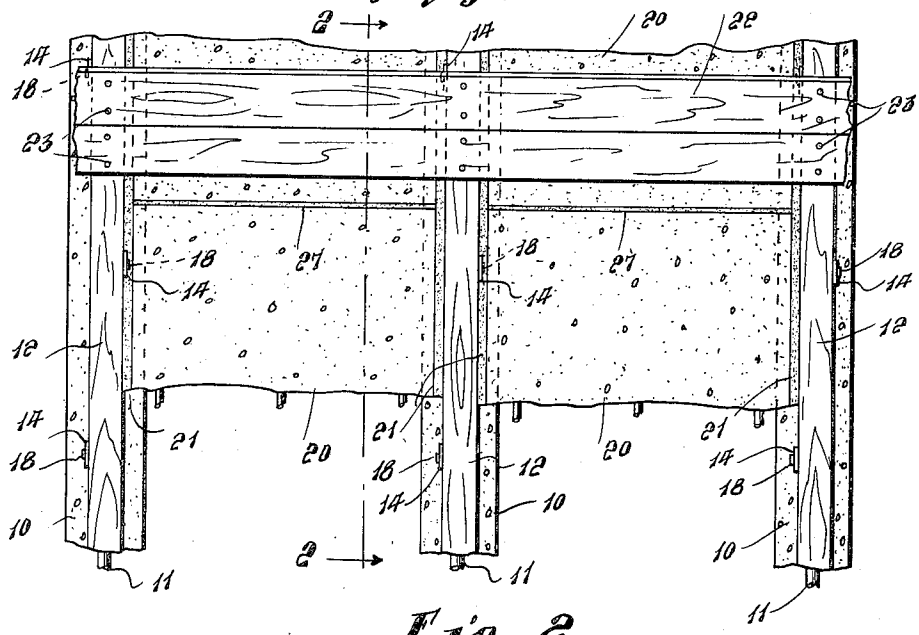


Fig. 2.

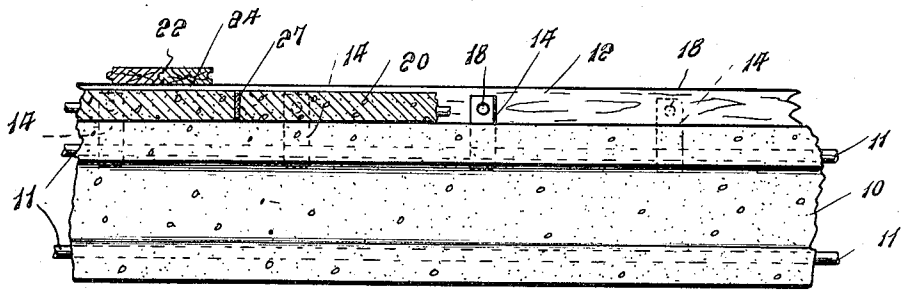
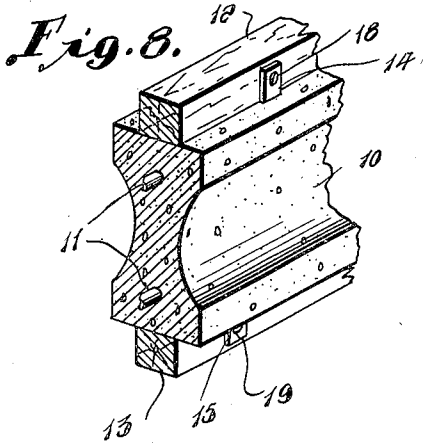


Fig. 8.



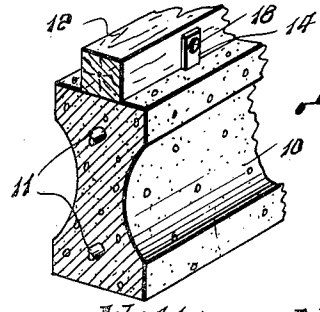


Fig. 7.

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JOIST AND STRUCTURAL CONNECTIONS THERETO

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Fig. 3.

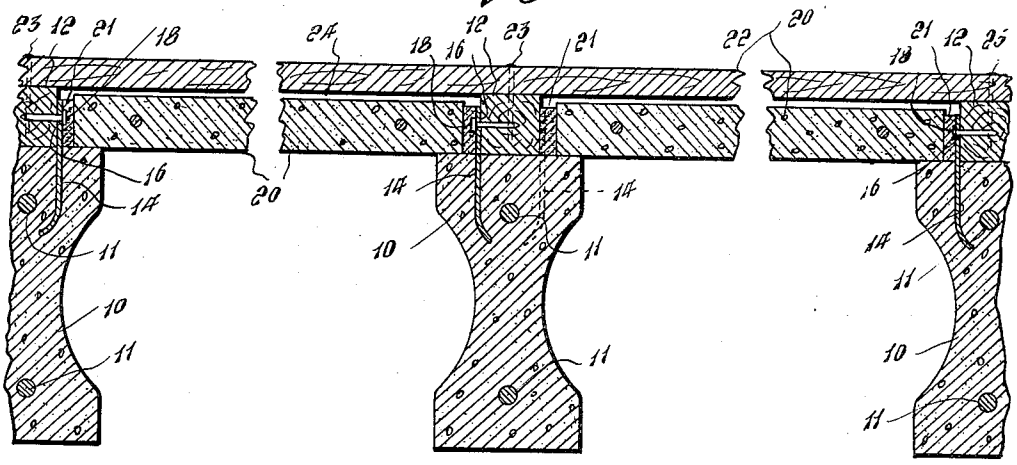


Fig. 4.

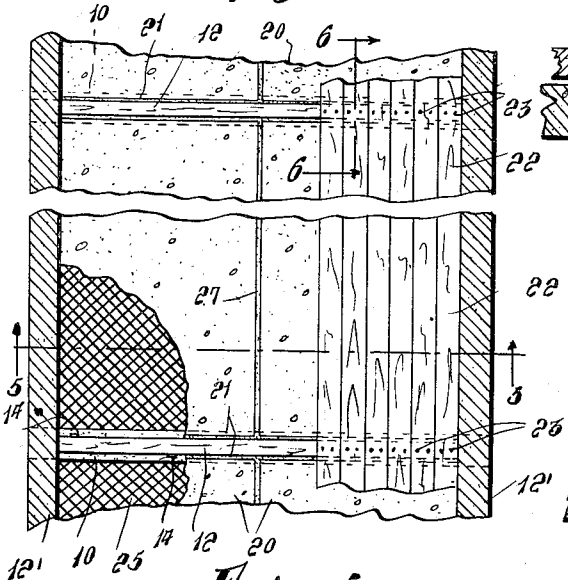


Fig. 6.

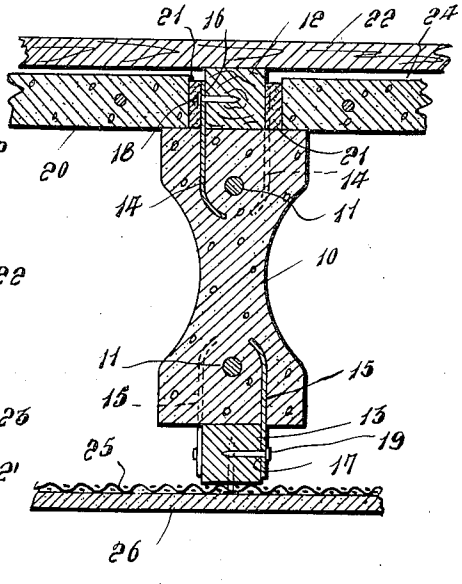
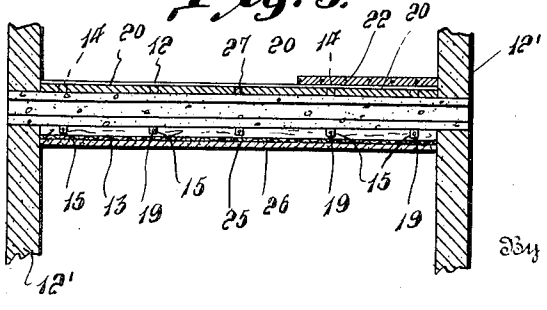


Fig. 5.



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UNITED STATES PATENT OFFICE

2,211,667

JOISTS AND STRUCTURAL CONNECTIONS THERETO

William Moesly, Fort Lauderdale, Fla.

Application August 24, 1939, Serial No. 291,758

2 Claims. (Cl. 72—61)

This invention relates to a joist and connections therefrom for a floor or a ceiling and aims to provide a novel structure wherein anchor members are secured in a precast joist to accommodate nailing strips thereon for flooring or a ceiling, and in combination with termite-proof slabs spanning adjacent joists and in sealed relation to the nailing strip and joist, whereby the nailing strip is substantially embedded and fastened to the slab in a termite-proof manner.

It is further aimed to provide such a construction which is relatively inexpensive and which may be expeditiously constructed and which is durable.

Another aim is to provide such a structure as is moisture proof as well as termite-proof.

Various additional objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:

Figure 1 is a fragmentary view showing the invention in plan as practiced in connection with a floor;

Figure 2 is a longitudinal sectional view taken on the plane of line 2—2 of Figure 1;

Figure 3 is an enlarged sectional view taken at a right angle to Figure 2, and partly broken away;

Figure 4 is a fragmentary plan view showing the invention practiced in connection with both a floor and a ceiling;

Figure 5 is a vertical sectional view taken on the line 5—5 of Figure 4;

Figure 6 is a detail section taken on the line 6—6 of Figure 4;

Figure 7 is a perspective view of a joist and nailing strip thereon, and

Figure 8 is a perspective view of a joist and nailing strips thereon, one for a floor and one for a ceiling.

Referring specifically to the drawings wherein like reference characters designate like or similar parts, any desired number of precast concrete joists 10 are employed preferably having reinforcing rods 11 therein, the diameter of which may be increased or decreased with an increase or decrease, respectively, in the depth of the joists 10 to increase or decrease, respectively, the load capacity of the construction Joists 10 have their ends resting on the walls 12' and are preferably embedded therein, as with mortar.

Nailing strips 12 of wood or any other suitable material are disposed on the tops of the joists while in some instance, nailing strips 13 of wood or any other desired material may be disposed against the lower surfaces of the joists. Embedded in the concrete joists 10 are anchors 14 and when the nailing strips 13 are employed, anchors 15 are also embedded therein. The anchors 14 and 15 are preferably of metal and may be straps, flat, round or otherwise and for instance bolts. Said anchors 14 and 15 project beyond the respective ends of the joists and have openings 16 and 17 therethrough through which nails, bolts or other fastenings may be passed at 18 and 19, respectively, to secure the nailing strips 12 and 13 in place. The anchor members 14 and 15 may be used at intervals of various distances, as preferred.

Resting on and spanning adjacent joists 10 at their upper surfaces, are slabs 20 of concrete or any other material which is vermin proof. The slabs 20 terminate short of the nailing strips 12 and provide spaces in which a cementitious sealing agent 21 is disposed while in a plastic state and which is adapted to dry. Such material may be of any desired nature as for instance mortar or mastic. The same covers the exposed ends of the anchors 14 and fastenings 18, and in effect embeds the nailing strips in the slabs and mounts them in a manner whereby they cannot be attacked by upward travel of termites.

Conventional tongue and groove flooring 22, of wood, or any other desired flooring, may be laid over the strips 12 and nailed or secured thereto as at 23. Preferably a space 24 is left between the flooring and the slabs 20 as shown.

Reverting to the strips 13, they may be used in any desired manner for the support of a ceiling as best shown in Figures 4, 5, 6 and 8. For instance metallic lathing 25 may be nailed to the strips 13 or any other suitable lathing may be used, and plastering or the equivalent 26 applied to such lathing.

Between the joints of different slabs 20, a suitable seal against termites or the like is provided as at 27, by using mortar, mastic, or the like.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:

1. In building construction, concrete joists, anchor members in such joists having portions projecting therefrom, nailing strips for an adjacent structure, said nailing strips being secured to said portions, slabs spanning adjacent joists,

and sealing material between the edges of the slabs and the nailing strips whereby the nailing strips are substantially embedded.

2. In building construction, concrete joists, anchor members in such joists having portions projecting therefrom, nailing strips for an adjacent structure, said nailing strips being secured to said portions, slabs spanning adjacent joists, sealing material between the edges of the slabs and the nailing strips whereby the nailing strips are substantially embedded, and flooring secured to the nailing strips above the slabs.

WILLIAM MOESLY.