Sept. 27, 1938. L. C. SCHWENSEN ET AL 2,131,485

SOUND DEAFENING SUPPORTING MEANS FOR FLOORS

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Fig. 1

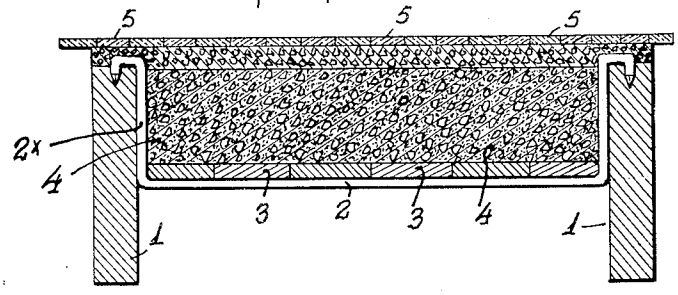


Fig. 2

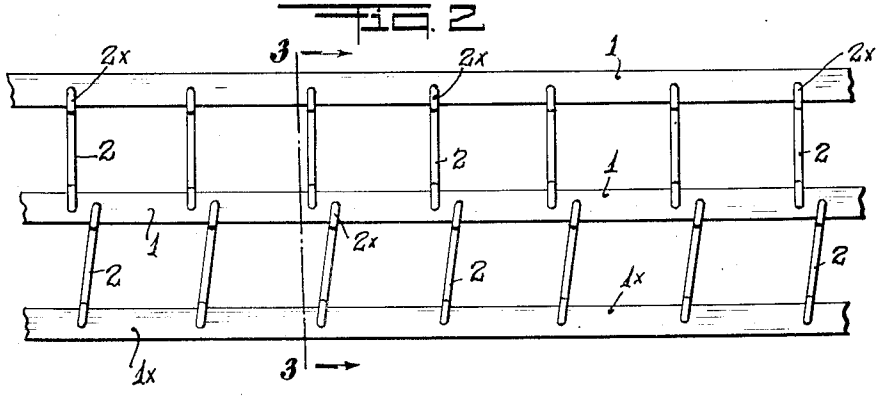


Fig. 3

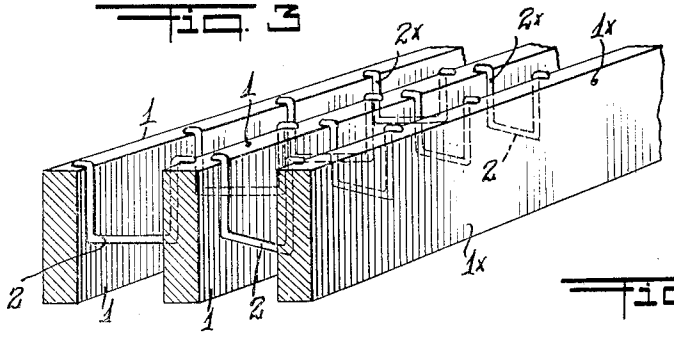


Fig. 5

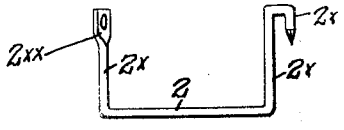
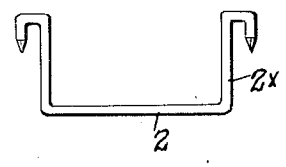


Fig. 4



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SOUND DEAFENING SUPPORTING MEANS FOR FLOORS

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2 Claims. (Cl. 72—70)

In the construction of buildings it is a general practice where cement, concrete, terrazzo, composition or tile floors are used in halls, bathrooms, kitchens, etc., a sub-flooring is required to receive at least a three-inch layer of concrete as a foundation. It is now the custom to provide means to support the cinder and concrete filling used for this purpose by nailing furring strips to the side of the floor supporting beams about five inches down from the top to provide support for the short pieces of boards which are placed between the beams crosswise. This process entails considerable labor. The boards cannot be pre-cut into short lengths because in practice the beams are rarely spaced at equal distances apart. Even when it has been determined, for example, that the spacing of the beams shall be twelve inches the spacing may vary to the extent of one or two inches under that measurement at various places in the beam assembly. By means of the present invention such variance is readily compensated for.

The object of this invention is to provide means of the utmost simplicity and ease of application to the beams regardless of space variations for supporting boards to be laid lengthwise between the beams and to eliminate the necessity of nailing furring strips between the beams, which is now the custom. By means of the invention, a stronger structure is obtained by applying the pressure resulting from the sound-deafening composition directly upon the top of the beams instead of upon the lower portions of the beams. At this point moisture from the concrete will, in due time, cause the furring strips and lower sections of the beams to rot and the wood to fail as a support.

The invention will be described with reference to the accompanying drawing, in which:

Figure 1 is a transverse vertical section through two floor beams with a tile covering and underlying sound-deafening filling supported by means of the present invention.

Figure 2 is a plan view showing three beams, the first two spaced correctly according to a predetermined spacing and the succeeding spacing being less, the figure illustrating the position of successive rows of bracket members.

Figure 3 is a sectional perspective view on the line 3—3, Figure 2.

Figure 4 is a view in side elevation of our preferred form of bracket member.

Figure 5 is a view in side elevation of a modified form of bracket member.

Referring to Figure 1 of the drawing, I have shown two floor supporting beams 1 connected by means of my improved hanger bracket 2. The bracket comprises a rod, preferably round in cross section having at each end an upwardly bent extension 2x which at its top is bent horizontally and thence formed with a depending nail-like end adapted to be driven into the top of the beam.

Upon successive brackets extending along the two beams 1, as shown in Figure 2, are placed boards 3 extending lengthwise of the beams. This forms a supporting surface for the concrete and cinder fill shown at 4. The fill is covered with a surface comprising a more dense concrete mixture which extends to the top of the bracket members 2. Upon the surface may be placed the final floor finish layer which may consist of tiles, terrazzo, mosaic or plastic composition, tiles being shown at 5.

The bracket described herein is so constructed as to lie with its vertical spacing end sections closely abutting the opposed beams throughout the length of said sections whether the beams are correctly spaced or lie closer to each other than in correct spacing. Thus if the correct spacing, as between beams 1 is twelve inches and the next beam 1x is spaced eleven inches from its opposed beam 1, the brackets can first be brought with one vertical end section in contact with one of the two beams and then swung until its other vertical end section abuts the second beam, whereupon the nail-like ends can be driven down into the beams to complete the spacing attachment. This angular arrangement of the bracket members is shown between beam 1x and the opposed beam 1 in Figures 2 and 3 of the drawing. In both cases the brackets have the same action and strength, and the labor required in applying them to the beams is slight.

In Figure 5 we have shown a modification of the hanger member in that one end is flattened and apertured to receive a heavy anchor nail to be driven into the beam against which that end of the device is placed. If desired, the flattened end may be placed at a slight angle so that in the case of a spacing between the beams somewhat less than normal the flattened end will lie flush against the side of the beam, and if the spacing is normal, the driving home of the heavy nail will affect the turning of the flattened end to right angles, since the device may be made of a medium or medium soft steel which will not tend to crystallize and will permit such action. Our preferred form however, is shown in the preceding figures.

Having described our invention, what we claim and desire to secure by Letters Patent, is as follows:—

1. In a sound-deafening floor construction, in combination with spaced floor beams, of a plurality of hanger members, each hanger member comprising a rod having at each end an upwardly bent extension adapted to lie in abutment with the vertical wall of a beam, an upwardly bent extension being at its top bent horizontally and thence formed with a depending nail-like end, adapted to be driven into the top of the beam and adapted to act as a pivot for the swinging of the hanger member laterally so that the opposite upwardly bent extension will lie in abutment with the vertical side of the second beam, and means carried by the last named upwardly bent extension whereby the same may be secured to the beam which it abuts.

2. In a sound-deafening floor construction in combination with spaced floor beams, of a plurality of hanger members, each hanger member comprising a rod having at each end an upwardly bent extension, which extension at its top is bent horizontally and thence formed with a depending nail-like end, one of said nail-like ends being adapted to be driven into the top of the beam and to serve as a pivot whereby the hanger member may be swung on said pivot to bring the second upwardly bent extension into abutment with the second beam and thence secured to said beam by driving its depending nail-like end therein.

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