

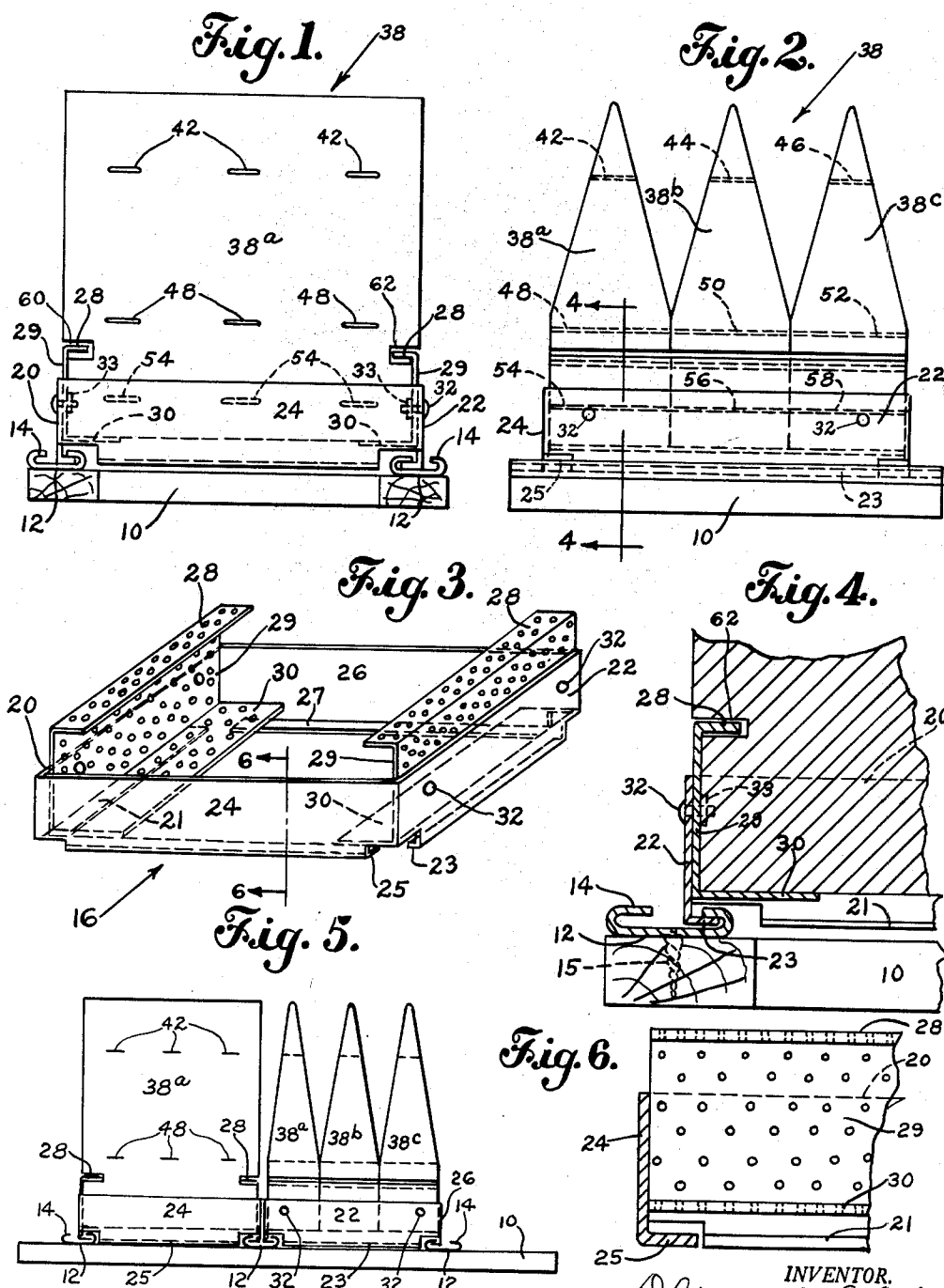
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SOUND ABSORBING DEVICE HAVING FLANGE GUIDES

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This invention relates to a sound absorbing device having a connector.

One object of my invention is to provide a sound absorbing device with a connector that has four sides each of which carries a flange guide extending below said sides.

Another object is to so form said connector with said flange guides that the latter are always positioned to slidably connect with a track attached to a support or frame.

Still another object is to provide said connector with oppositely disposed channel members one portion of which serves as a retainer and another portion serves as a bottom member to support sound absorbing units.

A further object is to construct said connector so simply that the minimum amount of material and skill are needed to build it and yet have such a device that adequately serves its purposes.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction, combination and arrangement of parts such as is disclosed by the drawing. The nature of the invention is such as to render it susceptible to various changes and modifications, and therefore, I am not to be limited to the construction disclosed by the drawing, nor to the particular parts described in the specification; but am entitled to all such changes therefrom as fall within the scope of my claims.

In the drawing:

FIG. 1 is a side elevational view of my sound absorbing device slidably connected to its supporting frame.

FIG. 2 is a side elevational view thereof taken at a right angle to that of FIG. 1.

FIG. 3 is a perspective view of a connector forming part of my device.

FIG. 4 is an enlarged, fragmentary, sectional view taken on the line 4-4 of FIG. 2.

FIG. 5 is an elevational view showing two of my devices at right angles to each other and in mounted position on a support that is attached to a wall, ceiling or the like.

FIG. 6 is an enlarged, fragmentary, sectional view taken on the line 6-6 of FIG. 3.

As illustrated, my device forms an assembly which has a support having a plurality of straps or support frames 10 that are spaced apart as shown, and are attached to a wall, floor or ceiling, for instance. Tracks 12 are attached to said supports, and each track has two inturned loops 14 spaced apart that serve as retainers for flange guides, later described.

A sound absorbing device or other article embodies a connector or holder 16 having a left side 20 terminating in an inwardly extending angle portion or flange 21, a right side 22 terminating in an inwardly extending angle portion or flange 23, a front side 24 terminating in an inwardly extending angle portion or flange 25 and a rear side 26 terminating in an inwardly extending angle portion or flange 27. Said four flanges are at the bottom of said sides and serve as guides, as later described.

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Said four sides may be integral or joined at the corners as by welding, and they are notched at their corners as illustrated in said FIG. 3.

Said connector 16 has two channel members at opposite sides each having a retainer tongue 28, an intermediate portion 29 at a right angle to the latter and to a bottom portion 30 which latter portions serve as a bottom for said connector 16. Bolts 32 and nuts 33, as shown, attach said channel members at their intermediate portions 29 to said sides 20 and 22.

A sound absorbing member 38 is shown having three sound absorbing units 38a, 38b and 38c that are associated together, all three units being within the four sides of said connector 16. At their upper portions each said unit is separately embraced laterally by ties 42, 44 and 46 to hold the laminations forming them together. Other ties for said three units are intermediate ones, identified by numerals 48, 50 and 52, and the lower ones identified by numerals 54, 56 and 58. These sound absorbing units 38a, 38b and 38c are shown as having wedge-shaped upper portions, as in said FIG. 2, although their shapes may vary as desired.

Extending for a short distance into each of said units 38a, 38b and 38c are two slots or kerfs 60 and 62. These slots extend into the wider part (or lower half as shown) of said units, and said channel member tongue portions 28 extend into them, thus connecting said sound absorbing units to said connectors 16.

Since it is desirable to arrange my said sound absorbing members 38 in alternate positions, one member on a connector 16 may be slid on two of said tracks 12, using said flange guides 21 and 23 to make the sliding connection, so that three of said units 38a, 38b and 38c are in the position shown at the left in said FIG. 5. Another said member 38 on a connector 16 is arranged so that its said three units 38a, 38b and 38c are positioned at right angles to the three previously referred to at the left, in which event said flange guides 25 and 27 make the sliding connection.

What I claim is:

1. A sound absorbing assembly comprising a support having a pair of tracks extending substantially parallel and spaced apart, each said track embodying an inturned loop, a sound absorbing device comprising a connector embodying two pairs of oppositely disposed sides connected together and each having an angularly extending flange guide at the bottom thereof, said guides of each said pair being adapted to enter said loops, and two of which flange guides extend into said inturned loops whereby said connector is slidably connected to said support, and a sound absorbing member extending between and spaced from and enclosed by said four sides and having two oppositely disposed slots extending laterally inward, two oppositely disposed channel members each embodying a bottom portion on which said sound absorbing member rests and which are spaced upwardly from said flange guides, an intermediate portion extending upwardly from said bottom portion and inwardly of and attached to two of said sides, and a retainer tongue portion extending angularly inward from said intermediate portion and entering said slots.

2. A sound absorbing assembly comprising a support having a pair of tracks extending substantially parallel and spaced apart, each said track embodying an inturned loop, a sound absorbing device comprising a connector

embodying two pairs of oppositely disposed sides connected together and two of which sides each having an angularly extending flange guide at the bottom thereof that extend into said intumed loops whereby said connector is slidably connected to said support, and a sound absorbing member extending between and spaced from and enclosed by said four sides and having two oppositely disposed slots extending laterally inward, two oppositely disposed channel members each embodying a bottom portion on which said sound absorbing member rests and which are spaced upwardly from said flange guides, an intermediate portion extending upwardly from said bottom portion and inwardly of and attached to two of said sides, and a retainer tongue portion extending angularly inward from said intermediate portion and entering said slots.

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