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FALSE BEAM CEILING STRUCTURE

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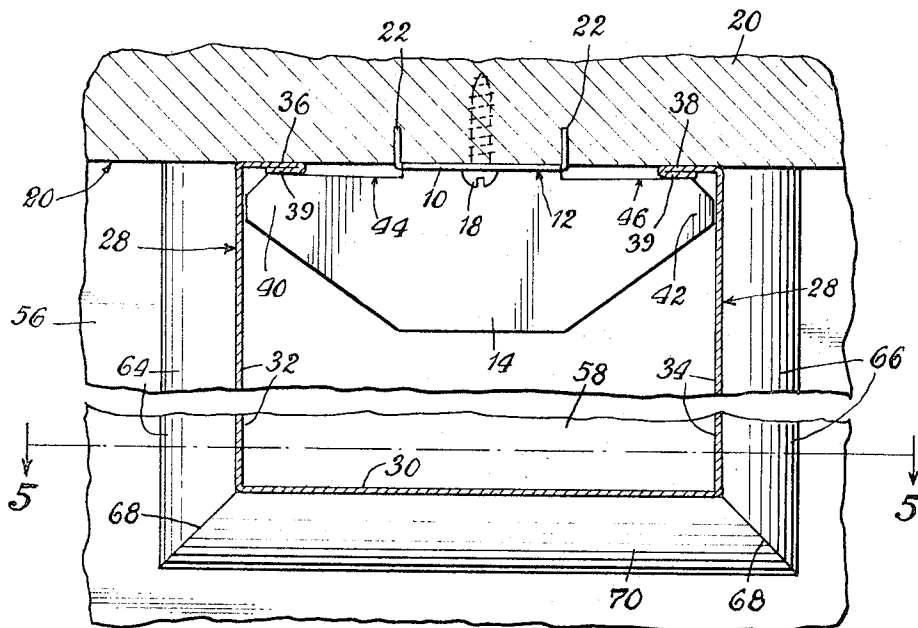


Fig. 1

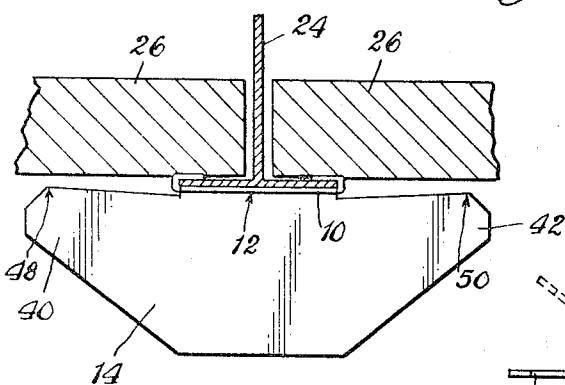


Fig. 4

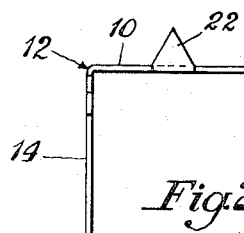


Fig. 2

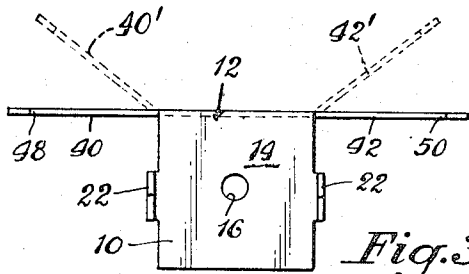


Fig. 3

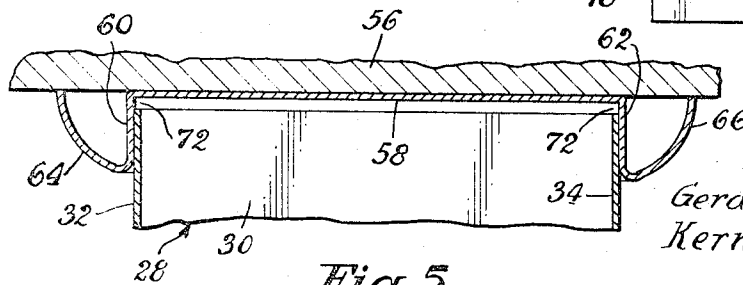


Fig. 5

Inventors
Gerald John Joseph
Kern Clair Olson
by W. Bartlett Jones
Attorney

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FALSE BEAM CEILING STRUCTURE

Gerald John Joseph, North St. Paul, and Kern Clair Olson, Minneapolis, Minn., assignors to Wood Conversion Company, St. Paul, Minn., a corporation of Delaware

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ABSTRACT OF THE DISCLOSURE

A simulated wood beam of U-shaped sheet metal is supported from either a wood, plaster, or metal suspended ceiling by hanger members having laterally extending ears.

The present invention relates to a hanger useful for suspending a simulated wooden beam, which may be a wood-grained channel structure in the form of a beam.

The invention makes it possible for any type of ceiling to be changed in appearance by adding below it what appears to be supporting beams.

It is the object of the invention to supply a hollow simulated beam in the form of a channel to extend between two opposite edges of a ceiling and in contact with the ceiling, and to mount said beam on a plurality of aligned supports depending from the ceiling.

In carrying out the invention, a channel beam is formed of which the channel sides have inwardly directed terminal flanges to lie against the ceiling over aligned supports depending from the ceiling. Said supports provide a thin space between their top edges and the ceiling to receive said flanges. The channel sides are sufficiently resilient to permit spreading their edges apart to widen the distance between the flanges to permit entering said flanges in said thin spaces.

The invention may be carried out in numerous ways and preferably with a plurality of integral hangers to be secured to the ceiling in alignment to provide aligned spaces for receiving said flanges of the beam.

Suitable hangers and a ceiling embodying them are shown in the accompanying drawing, in which:

FIG. 1 shows in vertical cross-sections a ceiling and a false beam, and secured to the ceiling one of aligned hangers from which said beam is suspended.

FIG. 2 is a side view of the hanger of FIG. 1 looking to the right.

FIG. 3 is a plan view of the hanger of FIG. 1 at the plane of the ceiling with the ceiling removed, showing in dotted lines one way to modify such hanger.

FIG. 4 shows the hanger of FIG. 1 mounted on a conventional T-runner of a suspended ceiling.

FIG. 5 is a horizontal cross-section taken on line 5—5 of FIG. 1, showing an end plate for the false beam.

The preferred hanger is made for mounting on several types of ceilings by the provision of a hole in a mounting portion for headed means, such as a screw. It is also made with bendable tabs for clinching it onto the flanges of a conventional T-runner in the grid of a suspended ceiling.

The beam-supporting portion is carried dependingly from a secured mounting section and is provided with outwardly extending integral ears of which the tips are spaced from the ceiling by clearance spaces sufficient in size snugly to receive hidden flanges of a false beam to hold the flanges tight against the ceiling.

The preferred form of the hanger is a right angled piece having a mounting section 10, a folding line 12, and a beam-supporting section 14. The mounting section is planar. It has a hole 16 for means such as screw 18

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shown in FIG. 1 to secure it to any flat ceiling indicated at 20. Also, it is provided with outwardly extending right angular prongs or tabs 22 on opposite sides of the section 10 for bending over flanges such as are provided by a conventional T-runner 24 (FIG. 4) on which ceiling panels 26 are supported.

FIG. 1 shows a false beam 28 having a channel web 30 and channel sides 32 and 34, normally parallel as shown, but suitably resilient to be springable outwardly. The channel sides have inturned narrow right-angular flanges 36 and 38, respectively, to lie flush against a ceiling, and to be supported by the outer ends of the supporting section 14. Preferably, the flanges 36 and 38 are strengthened by doubling back the edges as shown at 39. For supporting the flanges 36 and 38 the section 14 has outwardly extending ears 40 and 42 which in the vicinity of their outer ends provide a thin clearance space below the ceiling for snugly receiving the flanges 36 and 38.

The desired clearance space is provided by a portion of the uppermost edges of the ears. Preferably, the uppermost portion of the ears is located in the vicinity of the ends of the ears, but slightly inward from the ends, so as to support the flanges slightly inward from the tops of the side walls 32 and 34. As shown, top edges 44 and 46 of the ears rise slightly from a level below the top (FIG. 1) of section 10 toward, but not to, the plane of the ceiling, and to the flange supporting portions 48 and 50.

It is preferred to have the supporting section 14 as a plane at right angles to the mounting section 10, although this is not necessary. When it is desired to use such a wide hanger for a beam narrower than shown, the ears may be bent from coplanar relation to any desired extent as shown by ears 40' and 42' in FIG. 3.

In practice a number of hangers are secured to a ceiling with the supporting regions 48 and 50 aligned in spaced parallel lines. Then a channel-form such as shown has its sides sprung outwardly sufficient to pass the two ears 40 and 42 between the flanges 36 and 38, so that the flanges may spring back into the clearance spaces between the regions 48 and 50 and the ceiling 20.

To complete the decorative effect and to hide any gap between the end of a beam and a side wall 56, there is provided a sheet metal plate bearing simulated quarter-round. This is shown in cross-section in FIG. 5. Against the side wall is a plate 58 as wide as the beam 30 is wide. It has terminal edges providing parallel channel sides 60 and 62 at right angles to the plate 58, which sides are extended in the shape of quarter-rounds 64 and 66 terminating flush with the side wall 56. These simulated quarter-rounds connect at simulated mitered joints 68 (FIG. 1) with a simulated quarter-round 70 at the junction of the plate 58 and the beam's channel bottom 30. In FIG. 5 the indicated spaces 72 result from a false beam slightly shorter than the distance from edge to edge of the ceiling.

The invention is not limited to the forms shown and various modifications are contemplated for special situations and are contemplated as falling within the scope of the appended claims.

We claim:

1. A ceiling structure comprising a main ceiling presenting a generally planar horizontal face and having two opposite edges, a plurality of spaced sheet metal hangers aligned and secured to said ceiling between said two edges, each hanger comprising sheet metal formed and bent on a folding line to provide a planar mounting section for the hanger and at a right angle thereto a planar section, oppositely directed ears extending from said planar section for supporting a simulated beam, said two ears having in the vicinity of their extreme ends uppermost top edges slightly below the plane of the

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outermost face of the mounting section, the top edges of said ears being slightly inclined such that the outermost ends of the top edges are closer to the plane of said mounting section than the inner ends of said top edges, said mounting section having an opening for headed securing means to pass through it in one manner of mounting the hanger, said mounting section also having at least two tabs extending from said mounting section in the opposite direction to said planar section for engagement over parallel flanges of a grid member in a suspended ceiling in a second manner of mounting the hanger, and a simulated beam immediately below said ceiling face extending between said two edges, said beam being in the form of a U-shaped hollow sheet metal form having vertical sides normally spaced apart by a distance to encompass between them the said two ears, said vertical sides having at their upper ends narrow intumed horizontal flanges to rest upon said outermost ends of the top edges and close the space between said top edges and said ceiling face, said sidewalls being sufficiently resiliently spreadable apart at the region of said flanges to separate said flanges for mounting the beam on said aligned hangers.

2. A hanger on which to suspend a sheet metal simulated beam below and in contact with a planar ceiling, said hanger comprising sheet metal formed and bent on a folding line to provide a planar mounting section for the hanger and at a right angle thereto a planar section, oppositely directed ears extending from said planar section for supporting inwardly directed flanges of a simulated beam, said two ears having in the vicinity of their

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extreme ends uppermost top edges slightly below the plane of the outermost face of the mounting section, the top edges of said ears being slightly inclined such that the outermost ends of the top edges are closer to the plane of said mounting section than the inner ends of said top edges whereby to engage inwardly directed flanges of a simulated beam to support the same in contact with a planar ceiling, said mounting section having an opening for headed securing means to pass through it in one manner of mounting the hanger, and said mounting section also having at least two tabs extending from said mounting section in the opposite direction to said planar section for engagement over parallel flanges of a grid member in a suspended ceiling in a second manner of mounting the hanger.

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FRANCIS K. ZUGEL, *Primary Examiner.*