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STOP BEADS IN SUSPENDED CEILINGS

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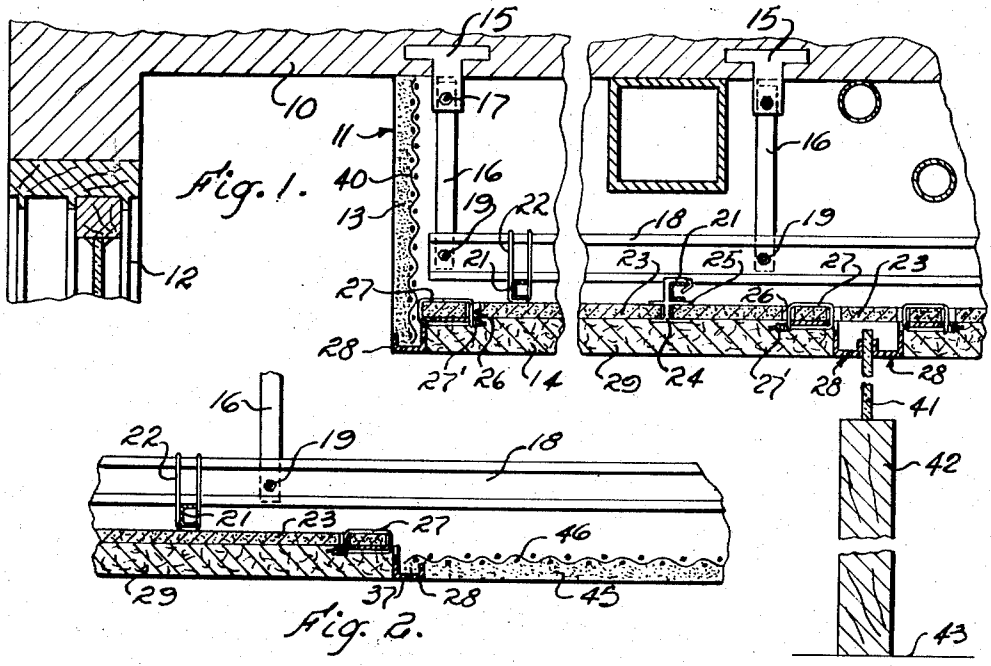


Fig. 1.

Fig. 2.

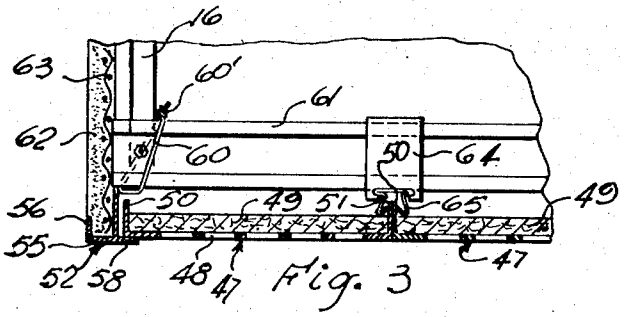


Fig. 3

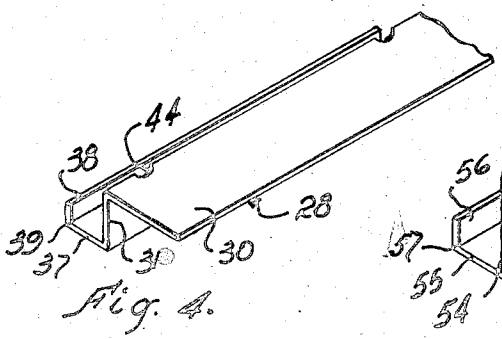


Fig. 4.

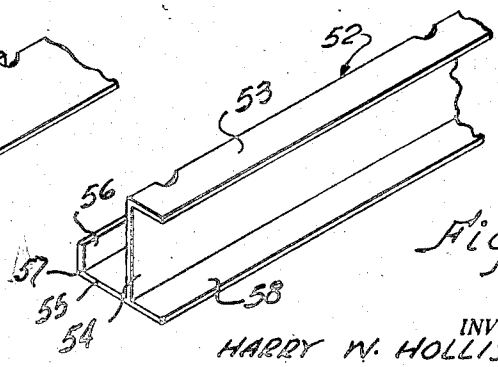


Fig. 5.

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STOP BEADS IN SUSPENDED CEILINGS

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3 Claims. (Cl. 72—118)

This invention relates to a stop bead for plaster.

It is an object of the present invention to provide a stop bead for forming a connection between plaster and acoustic blocks used in ceilings.

It is another object of the invention to provide a stop bead for plaster adapted to provide a horizontally extending corner formation along a drop acoustic ceiling.

It is another object of the invention to provide a horizontal stop bead for plaster work which can be readily assembled into the ceiling structure and which is adapted to be attached and secured in a flatwise manner to the underface of rock lath as by the mere application of the extension of a wire through the bead and through the rock lath and securing the ends thereof by a twisting operation.

It is still another object of the invention to provide a stop bead which can be so assembled and used in a ceiling structure as to provide retaining means for glass walls extending to the ceiling from a dwarf partition.

It is a still further object of the invention to provide a stop bead for use in plaster ceiling structures for making a connection between vertically extending plaster and acoustic blocks having a metal pan and which are secured by suspension from special clips in the ceiling structure and wherein the stop bead has a shelf portion on which one end of the acoustic metal pan can be rested for support.

Other objects of the invention are to provide a stop bead for plaster ceiling structures which is of simple construction, inexpensive to manufacture, easily embodied in the ceiling structure, simplifies the operation of adding the plaster to the ceiling, provides support for the plaster and a trimmed horizontal edge, of pleasing appearance, compact, light in weight, durable, efficient and effective in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Figure 1 is a vertical sectional view of a drop ceiling structure embodying the stop bead of the present invention;

Fig. 2 is a fragmentary sectional view of a ceiling structure showing the stop bead used in making a connection between horizontally extending plaster and acoustic block;

Fig. 3 is a fragmentary sectional view of a drop ceiling structure including a special form of stop bead adapted for supporting an acoustic block having a metal housing;

Fig. 4 is a fragmentary perspective view of a stop bead used in the ceiling structures shown in Figs. 1 and 2;

Fig. 5 is a fragmentary perspective view of a stop bead used in the ceiling structure shown in Fig. 3 in connection with acoustic blocks having a metal housing or pan.

Referring now particularly to Fig. 1, 10 represents a normal ceiling structure to which a drop ceiling structure indicated generally at 11 is attached and suspended therefrom to provide a concealment for pipes and ducts and

at the same time providing an acoustic ceiling. This is effected in the modernization of old buildings where air conditioning and various piping has to be concealed and wherein an acoustic structure can be provided.

In effecting this arrangement or construction, the drop ceiling structure is suspended from the original ceiling and in order that it does not interfere with a window 12, the drop ceiling structure is spaced from the window as shown, and the vertical wall of the drop ceiling structure facing the window is plastered as indicated at 13. Heretofore, this has been difficult with current ceiling structure assemblies because of the need for perfecting the horizontally extending edge of the drop ceiling structure that makes union with acoustic block 14.

The drop ceiling structure 11 is connected to the ceiling 10 through embedded toggle members 15 to which drop members 16 are attached or secured by means of fastening bolts 17. To the lower ends of these drop members 16 there are connected channel carriers 18 by bolt fasteners 19. Beneath the carriers 18 and secured thereto are transversely extending rails 21 that are fastened to the carriers by U-shaped attaching clips 22.

Rock laths 23 are suspended from the transverse channel members 21 by special clips 24 longitudinally spaced across the channel members 21 and having horizontal projections or fingers 25 for receiving and supporting the edges of the rock lath.

The rock lath may have holes 26 through which a wire 27 can be extended for securing to the underface of the rock lath a horizontally extending stop bead 28. The wire 27 is twisted as indicated at 27' to tightly secure the bead 28 to the rock lath.

An acoustic block 29 is secured to the underface of the rock lath by glue adhesive in the conventional manner.

The stop bead 28 has a horizontal portion 30 that fits flush against the rock lath undersurface, a drop portion 31 and a plaster retaining portion extending laterally from the lower end of the drop portion 31, as indicated at 32, and a turned up lip 38 to form a corner 39 running along the lower edge of the drop ceiling structure 11. A metal lath or mesh 40 is extended along the front of the structure and plaster 13 is affixed thereto in the usual manner and worked into the plaster portion 37 of the bead 28, as shown in Fig. 1, whereby to form a smooth and quickly made corner formation. By the use of this bead, there is no need to perform with skill a rounded corner of the plaster, and plasterers with less skill can quickly finish off the horizontal edge of the drop ceiling structure.

Another use for the horizontal bead 28 is shown at the right side of Fig. 1 where two beads 28 are arranged and secured to the rock lath in an opposing manner and spaced from each other so that an upwardly extending glass plate 41 can be disposed therebetween and retained supported in the ceiling structure and will thereby provide an inexpensive support for the upper edge of the glass plate built into the ceiling structure. These beads 21 would be secured to the rock lath 23 by wires 27 with ends twisted as indicated at 27'. The glass plate 41 can serve as the upper part of a partition, while the lower part of the partition supports the lower edge of the glass plate 41 and provides a dwarf partition 42 that rests on the floor 43. These stop beads thus not only serve as a device for finishing off the horizontal edge of a ceiling structure, but also when placing the ceiling structure in an opposing manner provides a simple means for supporting the upper edge of a glass partition plate.

The wires 27 not only extend through holes 26 in the rock lath but also extend through corner holes 44 in the stop bead 28. The holes 44 extend through the union of the top portion 30 and the vertical drop portion 31 of the stop bead 28.

In Fig. 2, there is shown a still further use of the stop

bead and a different drop ceiling structure wherein the plaster portion of the structure runs horizontally from the acoustic block and union is made by means of a stop bead **28** between the plaster and the acoustic block. A horizontal plaster formation is connected and extended from the acoustic block by running the plaster from plaster supporting portion **37** of the bead **28** and as indicated at **45** and supported from a horizontally extending mesh **46**.

In Fig. 3, there is shown a still further form of the invention wherein the ceiling structure is made to support acoustic block assemblies which have a metal pan on the underside thereof and which is perforated. This acoustic block or assembly is indicated generally at **47** and is perforated as indicated at **48**. The sides of the metal pan extend upwardly above acoustic material **49** within the pan and as indicated at **50** and **51**. The rock lath for this drop ceiling structure does not need a rock lath for the securement of the acoustic block to the superstructure. At the end of the drop structure shown in Fig. 3, a special stop bead **52** is used. This stop bead is shown in Fig. 5, and has a short horizontal top portion **53** and a relatively high vertically extending portion **54**, a plaster receiving portion **55** with an upturned corner lip **56** providing a corner **57** and a horizontal portion **58** serving as a shelf on which one edge of the metal acoustic pan assembly is rested, as shown in Fig. 3. The stop bead **52** is secured by a wire **60** that is twisted at its ends as shown at **60'** and to a carrier **61**.

A plaster vertical wall **62** is secured to a mesh **63** and is held in and shaped at its lower end by the portion **55** of the bead **52** and the turned up lip **56**.

On the carrier **61** is secured a fastening clip **64** that serves to connect transverse clip runners or rails **65** to which extensions **50** and **51** of adjacent acoustic assemblies **47** are retained.

It will thus be seen that with this drop ceiling structure the rock lath of the other structures are dispensed with.

It should now be apparent that there has been provided a drop ceiling structure wherein the lower horizontal edge of the structure can be easily and quickly formed without need to shape the plaster along the edge of the structure. It should be further apparent that the stop bead can be formed to not only provide an abutment for an acoustic block edge but also by the provision of a shelf portion serve as a support for an acoustic metal pan assembly. It will be seen that these beads can be easily

and readily formed and that when used in the ceiling structure provide a simple means for finishing off the edge of the structure and also it will be seen, as shown in Fig. 1, the same can serve to support the upper edge of a glass partition wall part.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What is claimed is:

1. In a drop ceiling structure, frame members depending from the ceiling, a horizontal plaster stop bead and means for securing said stop bead to the under sides of the frame members, said plaster stop bead having a horizontal attaching portion fitted flush against the under sides of the frame members, a drop vertical portion secured along one side of the horizontal attaching portion and running continuously therewith, a horizontal portion extending laterally from the lower end of the drop vertical portion and running continuously therewith, said latter horizontal portion having a turned up outer lip running therewith, acoustic members secured to the frame members and lying under the horizontal attaching portions of the plaster stop bead and a plaster wall mass supported on and along the lower horizontal portion of the stop bead and said stop bead thereby serving to join the acoustic members with the plaster wall mass.

2. In a drop ceiling structure as defined in claim 1, and said stop bead having a shelf portion extending inwardly from the drop vertical portion and serving to further support the acoustic members.

3. In a drop ceiling structure as defined in claim 1, and other stop beads of the same shape arranged in opposing relationship to each other, means for securing said other stop beads to the frame members with the turned up lip portions spaced from one another to provide a recess in the ceiling structure through which a glass wall partition plate may be extended to be held against lateral displacement with respect thereto and to make the connection of the partition with the ceiling wall structure.

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