Nov. 24, 1942. W. GOSS 2,303,269

SUPPORT FOR SUSPENDED CEILINGS

Filed Feb. 10, 1940

Fig. 1.

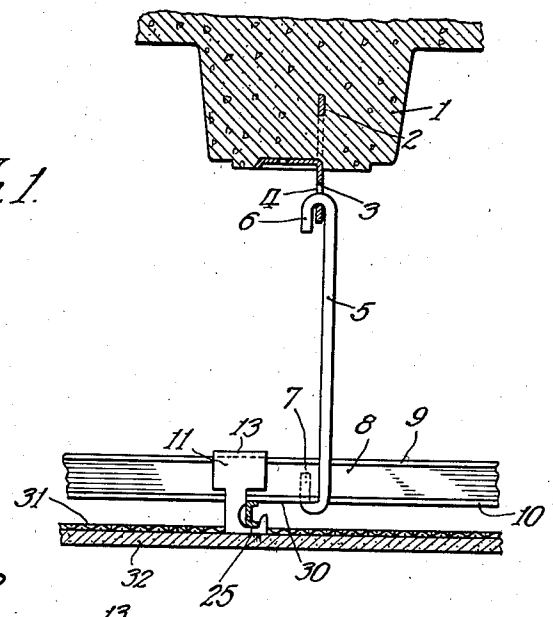


Fig. 2.

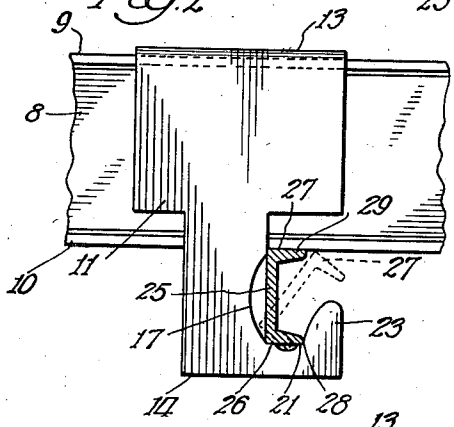


Fig. 3.

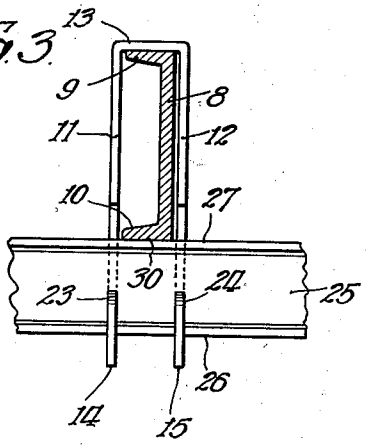
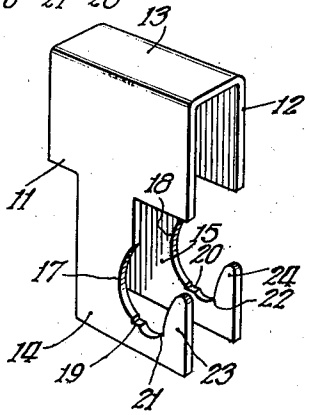


Fig. 4.



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SUPPORT FOR SUSPENDED CEILINGS

William Goss, Chicago, Ill.

Application February 10, 1940, Serial No. 318,244

3 Claims. (Cl. 72—118)

This invention relates to improvements in supports for a suspended ceiling, and particularly to a device for associating and holding in place ceiling supporting members and cross members of particular use in those instances where because of an attic, or because of uneven beams for any reason, it is not possible to have the lath supporting members closely adjacent to the beams, but requiring carrying members for the lath supports and the cross beams.

An illustration in which the lath supporting members are not contiguous to the beams but are suspended by means of carrying members is illustrated in Figure 8 of my United States Letters Patent No. 2,061,150. In that illustration it will be seen that the lath supporting members are associated with the cross members by means of wires which, while they serve the purpose, obviously have inherent defects and obviously do not produce a high degree of rigidity.

It is, therefore, an object of my invention to produce a device in which the ceiling supporting members and the cross members are rigidly held in place, and which is so constructed that the several members at angles to each other will thus serve to reenforce each other and to produce the desired rigidity.

It is further an object of my invention to produce such a device which is inexpensive to manufacture and which is readily and easily installed.

These and other objects of my invention will be apparent by an inspection of the drawing, in which

Figure 1 is an elevational view of my improved device showing the same in association with the ceiling supporting member and the cross member, all supported from the cement beams. In Figure 1 only one beam and only a small portion of the ceiling structure incorporated in my device is shown, but it will be obvious that for a complete ceiling a plurality of beams will be utilized, such as illustrated in Figure 8 of my United States Letters Patent No. 2,061,150.

Figure 2 is an enlarged side front view of my improved device showing the lath supporting member in dotted lines to indicate how the same is inserted as hereinafter described;

Figure 3 is an end elevational view of my improved device showing the cross member in cross section; and

Figure 4 is a perspective view of my improved device the details of which will hereinafter be described.

In the various views similar parts bear the same numerical references, in which 1 is a cement base, 2 the end of the metal member imbedded in the beam, 3 the other end of said member projecting downwardly through the cement beam having an aperture 4 therein through which is inserted the rod 5 by means of the hooked end 6 thereof, 7 is the hooked portion on the other end of the rod 5. 8 is the cross member having top and bottom flanges 9 and 10, which cross member is supported in the hook 7 of the rod 5. 11 is one parallel side of my improved device for associating and holding rigid the ceiling supporting members and the cross members, 12 is the other side of said device parallel to member 11, and 13 is a web at the top connecting the two sides 11 and 12. 14 and 15 are the bottom extensions of the sides 11 and 12 respectively, 16 the top thereof formed in a line substantially perpendicular to the web 13. 17 and 18 are the curved portions respectively of the sides 14 and 15, 19 and 20 are notched shoulders designed to serve as a support for the right-angled channel members hereinafter more particularly described. 21 and 22 are similar shoulders for supporting said right-angled, channeled members, and 23 and 24 are upwardly projecting portions of my improved device. 25 is the ceiling supporting member having flanges 26 and 27 at the top and bottom thereof respectively. 28 is the outer edge of the flange portion of the lath supporting member. 29 is the top surface of the flange 27. 30 is the flat bottom of the flange 10. 31 is the metal lath and 32 the ceiling attached to said lath.

In practice the cement beam will be formed in the ordinary manner with the metal members projecting from the bottom part of the beam for having inserted through an opening in said members a rod which may be of varying length, necessitated by the level of the ceiling desired, and the horizontal unevenness of the cement beam. Rods 5 will have hooks 7 at the end in which the cross members 8 will be carried and supported. My improved device will have a width slightly greater than the width of the flanges 9 and 10 of the cross member 8, and my improved associating and holding device will straddle the cross member 8. As many of my improved devices may straddle the cross member as may be desired, there being one of my improved devices for each ceiling supporting member on each of the cross members. These improved devices will be placed in desired alignment and after such alignment is accomplished the ceiling supporting members 25 are inserted in the rounded portion of my improved associat-

ing devices 17 and 18, with the flanges extending outwardly, such as is shown in the dotted lines in Figure 2, with the flange 26 received in the rounded portion 17 and coming to rest in the square, notched shoulder 19 and 20, of the sides 14 and 15 of my improved device, as shown in Figure 2. At the same time the corner of the flange 28 will come to rest on the square notched shoulder 21 and 22, the distance from the notched shoulder 19 to 21 and 20 to 22 being slightly greater than that of the flange 26 of the lath supporting member 25. By the same action the flat surface 29 of the ceiling supporting member 25 will lie in very close proximity to the flat bottom portion 30 of the cross member 8. In order to accomplish this purpose it will be noted that the height of my cross piece associating member will be so constructed and of such size that from the top inside portion of the web 13 to a horizontal plane formed by the notched shoulders 16 and 19 and 21 and 22 the distance will be slightly greater than the combined height of the cross member 8 and the lath supporting member 25. It will be obvious that the cross member 8 will be rigidly held in place by my improved device by reason of the fact that the inner dimensions of the web 13 are only slightly larger than the width of the flanges 9 and 10 of the cross member 8. In turn the ceiling supporting members which are placed at right-angles to the cross members are rigidly held in place by reason of the aforesaid relative length of the cross member holding device, and the ceiling holding members in turn are prevented from creeping longitudinally along the cross members 8 by reason of the metal lath which are attached to the ceiling supporting members. The net effect is obviously a most rigid and effective method of associating cross members in ceiling building operations.

It will be understood that changes in detail may be made without departing from the spirit and the scope of my invention and I do not limit myself to the specific embodiments shown or described, but what I desire to obtain by Letters Patent is as follows:

1. In combination a supporting beam, a U-shaped hanger arranged to straddle said beam with the legs of the U-shaped hanger depending on opposite sides, the depending legs having formed in a side edge thereof a recess having a top edge at substantially right angles to said side edge, and a curved bottom edge, said bottom edge having a shoulder formed therein, and a channel ceiling supporting bar received in said recess and heated on said shoulder, said channel having its upper flange in substantial abutment with the lower side of said beam.

2. In combination, a supporting beam, a U-shaped hanger straddling said beam with the legs of the U-shaped hanger depending on opposite sides, a recess in the lower portion of the side edge of said U-shaped portions having a top edge at substantially right angles to said side edge and having a curved side and bottom with the bottom notched to form a seat for a channel member and a channel member received in said recess and adapted to be rotated therein to a position in substantial abutment of its upper flange with the lower side of the said beam and with the lower flange thereof resting on said seat.

3. A U-shaped hanger arranged to straddle a supporting beam with the legs of the hanger depending on opposite sides, having formed in the side edge of the bottom portion of said hanger a recess, the top portion of said recess forming a right angle and the lower and bottom portion thereof being curved and notched to form a seat in the bottom portion, whereby a channel member may be received and rotated in said recess to a position where its upper flange is in substantial abutment with the lower side of the supporting beam and its lower flange is engaged with said seat after the U-shaped hanger straddles said beam.

WILLIAM GOSS.