

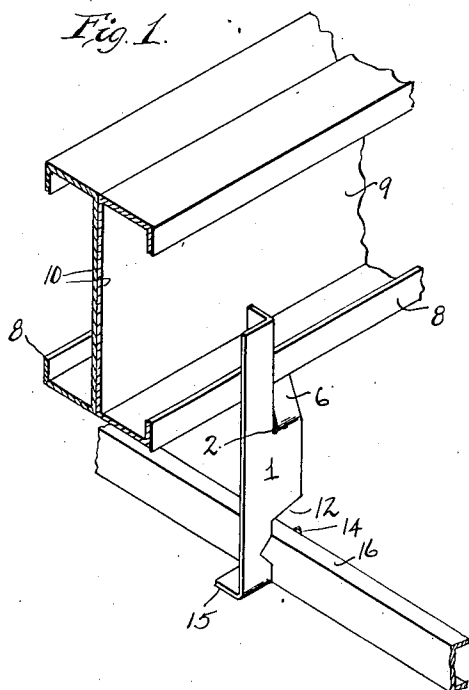
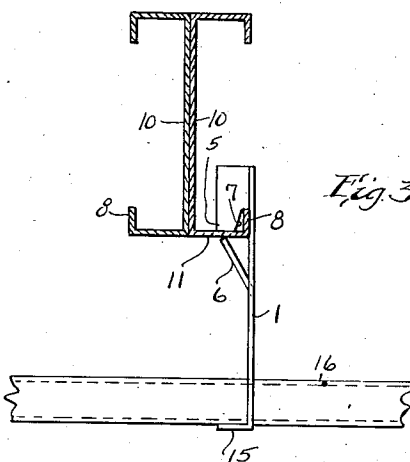
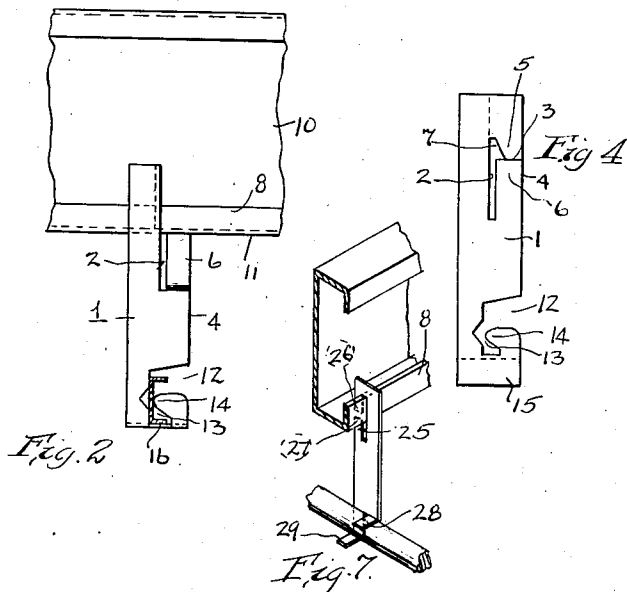
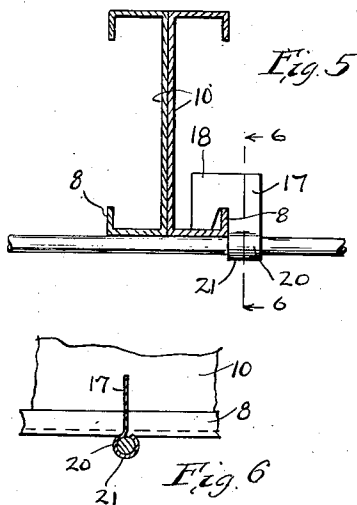
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B. M. YOUNGBERG

1,507,652

CEILING SUPPORT

Filed July 19, 1922



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UNITED STATES PATENT OFFICE.

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CEILING SUPPORT.

Application filed July 19, 1922. Serial No. 575,924.

To all whom it may concern:

Be it known that I, BIRGER M. YOUNGBERG, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Ceiling Supports, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The present invention relates to ceiling supports and more particularly to suspension devices which are adapted to support the rods or bars from metal lumber such as comprises the ceiling beams. In particular it relates to suspension devices adapted to be removably attached to metal lumber made up of channel sections or the like, the devices being provided with means for engagement with ceiling rods or bars of various types. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings:—

Fig. 1 is a perspective view of one of my devices attached to an I-beam and supporting a channel section; Fig. 2 is an elevational view with the supported channel in section; Fig. 3 is an elevational view showing the supporting metal lumber in section; Fig. 4 is a side elevational view of the suspension member proper; Fig. 5 is an elevational view showing a modified form of supporting member for round rods; Fig. 6 is a section on the line 6—6 of Fig. 5; and Fig. 7 is a perspective view similar to Fig. 1 but showing a modified form.

The suspension member proper is best formed, as shown in Fig. 4, from a flat strip 1 which is provided at its upper end with a longitudinally disposed slot 2 which is cut through as at 3, to one edge 4 of the strip in order to form a T-shaped slot and cut. This forms two tongues 5 and 6, the one toward the upper end of the member being beveled off as at 7 on its interior side and

this tongue 5 is bent at right angles to the plane of the strip on a line with the interior surface of the slot into the shape best shown in Figs. 1 and 3. The other or interior tongue 6 is bent outwardly from the plane of the strip so as to allow the other tongue to be hooked over the vertical flange 8 of an I-beam 9 or the like, such as is commonly used for metal lumber, these I-beams being formed of two channel sections 10 which have inturned vertical flanges 8. When the suspension member is to be secured on the I-beam, the tongue 5 is hooked over this vertical flange and then the lower tongue 6 is bent back toward the plane of the strip until it engages with the under surface 11 of the horizontal I-beam flange and thus locks the suspension member in place on the edge of the I-beam.

At the lower end the strip is provided with a notch 12 extending inwardly at a slightly obtuse angle to the edge of the strip and this notch is continued into a slot 13 extending downwardly in the strip and leaving a tongue 14, shaped like the ball of a rail, the portion of the strip 15 below the tongue being preferably bent at right angles to the plane of the strip so that it will lie under and support the bottom of a small channel 16 which may be slipped into the notch and slot and supported therein.

In the modified form shown in Figs. 5 and 6, the suspension device merely consists of a strip 17 which is provided with the same type of hooked end 18 as shown in the other figures, but here the lower tongue 6 of the previous forms is cut off so as to form a narrow strip 20 for the suspension device, which is rolled at its lower end into a cylinder 21 adapted to receive a ceiling rod which will be held closely adjacent the bottom surface of the I-beam. In Figs. 7 and 8 another modification is shown in which the upper end of the strip is provided with a T-shaped slot 25 forming tongues 26 and 27 which are adapted to be engaged over the vertical flange 8 of the channel member and under the bottom horizontal flange, as shown in Fig. 7, while the lower end of the strip is notched out to provide two downwardly extending tongues 28 and 29 spaced apart, which may be bent at right angles to receive a rod or bar and then bent to substantially encircle the same and thus support it in spaced relation below

the bottom of the I-beam in a similar manner to the method of supporting the channel, as shown in Figs. 1 and 2.

The present suspension devices are particularly adaptable for use with so-called metal lumber consisting of channels which are commonly used in modern fire-proof construction in lieu of wooden joists or beams and these suspension members are adapted to support and space from the metal lumber the necessary bars or rods to which the metal lath will be fastened in the usual way. By the use of these members, the supporting rods, bars or channel sections for the necessary lath may be quickly and easily attached to the metal lumber and spaced therefrom the correct distance so as to make a horizontal surface for the attachment of the lath. The clips can be applied on the job and it is only necessary to use a pair of pliers or the like to fasten them both to the metal lumber and to the rods which they support.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. A ceiling support member comprising a strip having a T-shaped slot at one end forming two tongues, the upper tongue being bent at right angles to the plane of the strip and the other tongue being bent outwardly, the upper tongue being adapted

to be hooked over the vertical flange of a ceiling beam, the lower tongue being adapted to be bent up against the bottom of the beam to secure the member thereon, and means on the lower end of the member adapted for engagement with the bar to be supported.

2. A ceiling support member comprising a strip having a T-shaped slot at one end forming two tongues, the upper tongue being bent at right angles to the plane of the strip and the other tongue being bent outwardly, the upper tongue being beveled on its interior edge and being adapted to be hooked over the vertical flange of a ceiling beam, the lower tongue being adapted to be bent up against the bottom of the beam to secure the member thereon, and means on the lower end of the member adapted for engagement with the bar to be supported.

3. A ceiling support member comprising a strip having a T-shaped slot at one end forming two tongues, the upper tongue being bent at right angles to the plane of the strip and the other tongue being bent outwardly, the upper tongue being beveled on its interior edge and being adapted to be hooked over the vertical flange of a ceiling beam, the lower tongue being adapted to be bent up against the bottom of the beam to secure the member thereon, and a notch and communicating slot in the lower end of said strip adapted to receive and support a bar below the ceiling beam.

Signed by me this 17th day of July, 1922.

BIRGER M. YOUNGBERG.