Dec. 19, 1933. J. PEAL 1,940,369

GUTTER HANGER

Filed May 6, 1931

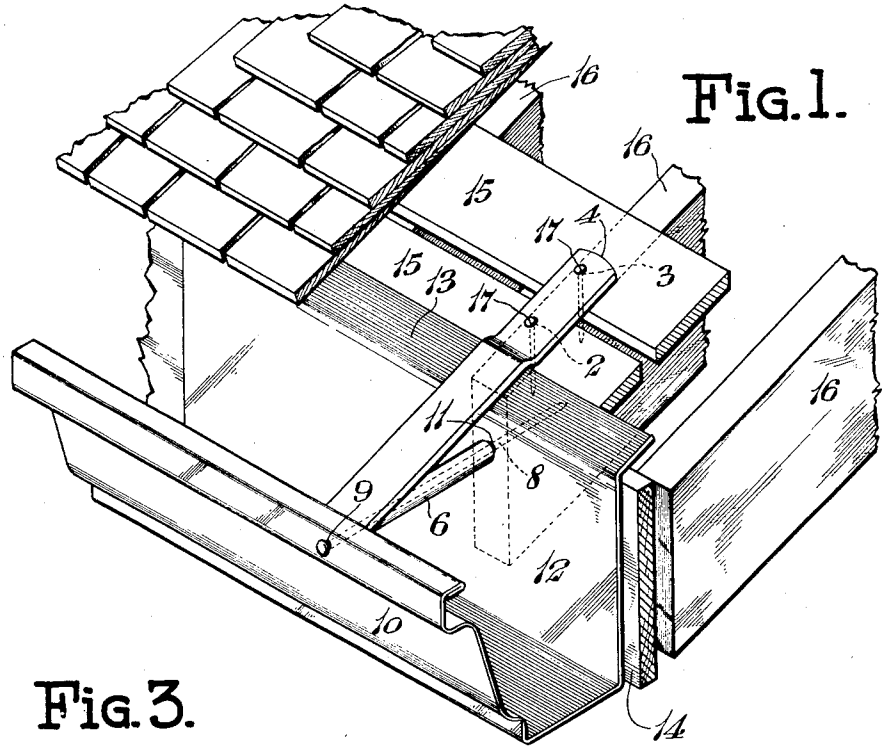


Fig. 1.

Fig. 3.

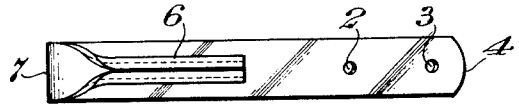


Fig. 2.

Fig. 4.

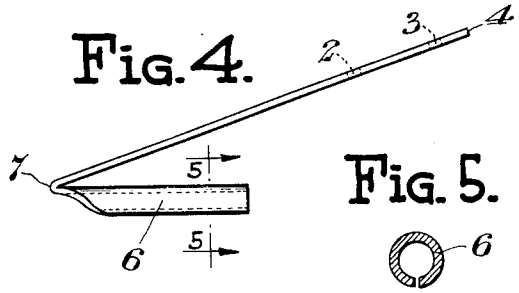


Fig. 5.

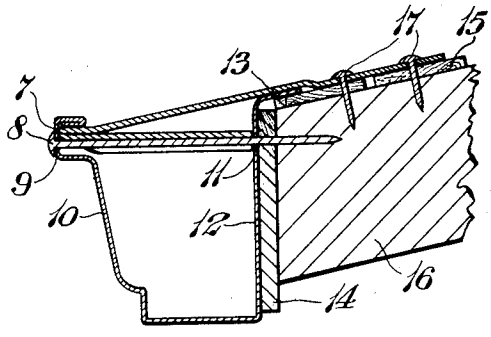
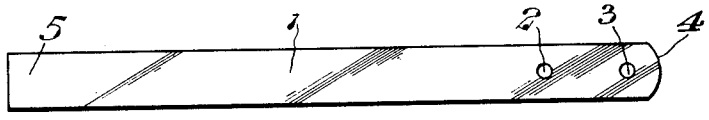


Fig. 6.



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GUTTER HANGER

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2 Claims. (Cl. 108—29)

This invention, stated in its broadest terms, relates to a combination support and hanger for gutters of the type commonly used upon buildings and is readily adaptable to various styles of gutters.

Heretofore the inside walls of gutters have been nailed to the frieze board and the outside wall supported by the so-called gutter hanger, which consists of a strip of metal bolted to the outer wall of the gutter and nailed to the sheeting, but the disadvantages of a hanger of this type is that there is no support between the outer wall and the inner wall of the gutter, the major portion of the gutter's weight being carried by the hanger, and, therefore, placing considerable strain upon the bolt and outer end of the hanger.

Another disadvantage of the common gutter hanger is that when painting the house, should the painter rest his ladder against the gutter the hanger would be put to considerable strain and in many cases buckle upwardly or downwardly, thus allowing the front wall of the gutter to be collapsed or pressed in towards the rear wall of the gutter.

Still another disadvantage of the common gutter hanger is that should the gutter become filled with snow or ice considerable strain is placed upon the outer wall of the gutter and the hangers, due to their present construction, will not support this undue strain, the result being that the gutter is forced out of shape and, therefore, subjected to considerable damage, especially so at the soldered joint between the lengths of the gutter.

The leading object of the present invention is to overcome the above described disadvantageous features in the construction of gutter hangers and to provide a gutter hanger wherein the front wall of the gutter is rigidly supported relative to the rear wall thereof.

A further object is to provide an improved gutter hanger in which simplicity is paramount and from which more efficient results can be obtained because of the one-piece construction.

The invention consists in the construction, combination, location and arrangement of parts hereinafter described and finally claimed.

In the drawing:

Fig. 1 is a fragmentary isometric view of a metal gutter supported by my improved gutter hanger, a portion of the roof construction being shown to clearly illustrate the method of installation;

Fig. 2 is a cross sectional view of Fig. 1;

Fig. 3 is a bottom view of the hanger;

Fig. 4 is a side view thereof;

Fig. 5 is a cross section through the sleeve portion of the hanger taken on a plane corresponding to line 5—5 of Fig. 4; and

Fig. 6 is a plan view of the blank before bending.

Referring to the drawing in detail and at present to Fig. 1, the shape of the metal gutter there shown is known as the "ogee gutter" to those skilled in the art, but it is to be understood that round gutters, box gutters or any other type of gutter heretofore supported by a gutter hanger can be equally well supported by my improved hanger.

The material from which the hanger is made depends upon the material with which the gutter is made—that is, should the gutter be made from galvanized sheet iron, the hanger would preferably be made from the same material but should the gutters be made of a copper alloy it would, therefore, be advisable to make the hangers from the same material.

Referring now to the construction of my improved hanger, an elongated strip of metal 1, as shown in Fig. 6, is provided with aligned holes 2 and 3 near end 4, the opposite end portion 5 being suitably bent to form a tube or sleeve member 6, as shown in Figs. 3 and 4. The hanger is then bent between its ends at 7 so that the sleeve or tube 6 is disposed at an angle relative to the plane of the shank of the hanger, as shown in Fig. 4. The sleeve or tube 6 is of a size suitable for receiving a large spike 8, as will presently be described and the holes 2 and 3 are of a size suitable for receiving a common six-or-eightpenny nail.

To install a gutter by the use of my improved gutter hanger, it will be necessary to provide a hole 9 in the front wall 10 of the gutter and an aligned hole 11 in the rear wall 12 of the gutter, as shown in Fig. 2. The rear wall 12 of the gutter can be equal in height to the front wall 10, or, if desired, can be made of a greater height to provide flap 13, which flap, when installing the gutter, is bent downwardly over the frieze board 14 and upon the sheeting 15, as shown in Fig. 1. The tube or sleeve 6 of the hanger is then placed between the front wall 10 and the rear wall 12 of the gutter and the spike 8 passed through the hole 9 in the front wall 10, through the tube 6, through the hole 11 in rear wall 12, through the frieze board 14 and into the end of one of the rafters 16, as clearly shown in Fig. 2. End 4 of the hanger is then

securely attached to the sheeting 15 and rafters 16 by the nails 17, which nails are passed through the holes 2 and 3, as clearly shown in Fig. 2. With this construction, it will be readily apparent that the front wall 10 and rear wall 12 of the gutter are held in fixed relation relative to one another by means of the tube 6 of the hanger and the end 4 of the hanger securely fixed to the roof, as described.

I have found in practice that by supporting a gutter with a hanger of the construction herein described, the gutter is so substantially fastened to the roof that it will easily support a man's weight and, under tests, supports more than a ton, without damaging the gutter; it will support a ladder without danger of buckling the straight portion of the hanger due to the support between the front wall 10 and rear wall 12 in the form of the tube 6 and the work of installing the gutter is materially reduced for the reason that there are no nuts or bolts to contend with, the installation merely requiring the driving of two nails and one spike for each hanger, which are preferably spaced about two feet apart.

An advantage of a hanger made in accordance with the foregoing description is that the gutter is supported in three places and the front wall 10 is rigidly supported in spaced apart relation relative to the rear wall 12, a feature which has heretofore never been accomplished, to the best of my knowledge, with any gutter hangers.

Another important feature of this improved gutter hanger is that its construction is extremely simple and consists of die and punch work.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and I, therefore, desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In combination with an eaves trough, a gutter hanger comprising an elongated flat strip of metal provided with nail receiving holes through one end thereof and having an integrally formed tube or sleeve at the other end extending at an angle to said flat strip, said flat strip being adapted to be nailed to the roof and said tubular portion being adapted to be placed between the front and rear walls of the eaves trough and to have a nail driven through said walls and tubular member into the building whereby a strong and substantial construction is secured and whereby said hanger may be easily placed in position and secured to the building and to the eaves trough, substantially as set forth and for the purposes specified.

2. In combination with an eaves trough, a gutter hanger comprising an elongated flat strip of metal having one end adapted to be secured to the roof and having a tube integrally formed upon its other end and bent at an angle thereto, said tubular portion being adapted to fit between the outer and inner walls of the eaves trough and to have a nail driven through said walls and through said tube into the building, substantially as set forth and for the purposes specified.

JOHN PEAL.