



(22) Date de dépôt/Filing Date: 2003/12/02

(41) Mise à la disp. pub./Open to Public Insp.: 2005/06/02

(51) Cl.Int.⁷/Int.Cl.⁷ E04D 13/064

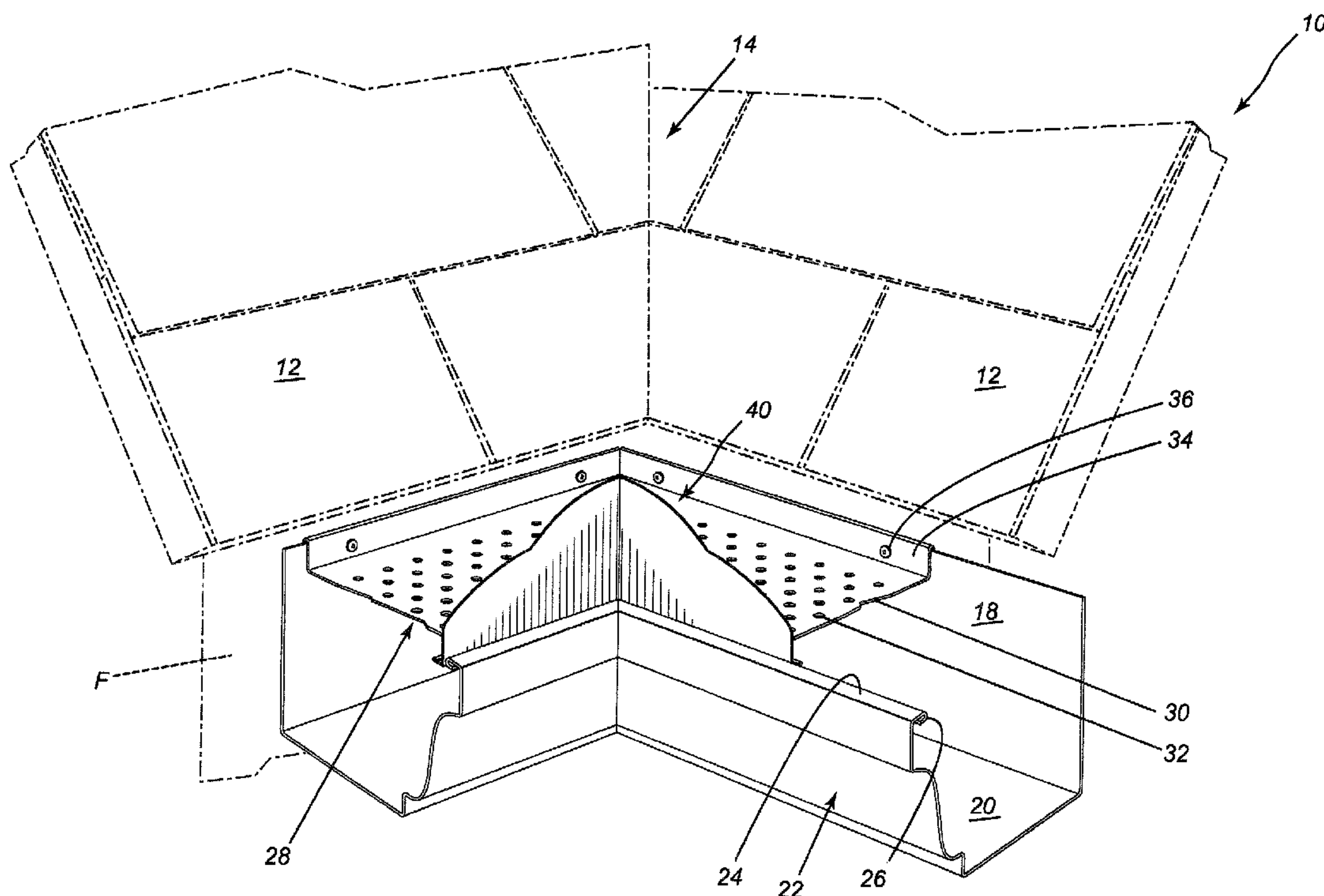
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(54) Titre : DEFLECTEUR DE DEBORDEMENT POUR COIN DE GOUTTIERE

(54) Title: GUTTER CORNER OVERFLOW DEFLECTOR



(57) Abrégé/Abstract:

A corner deflector for use with an eaves trough wherein the eaves trough is located proximate a valley in a roof, the deflector comprising first and second segments with a fold line separating the segments, at least one flange extending outwardly from a bottom edge of each of the segments, the flange being such as to permit securement to a gutter guard used with the eaves troughs. The deflector prevents overflow at the corners associated with roof valleys.

ABSTRACT

A corner deflector for use with an eaves trough wherein the eaves trough is located proximate a valley in a roof, the deflector comprising first and second segments with a fold line separating the segments, at least one flange extending outwardly from a bottom edge of each of the segments, the flange being such as to permit securement to a gutter guard used with the eaves troughs. The deflector prevents overflow at the corners associated with roof valleys.

GUTTER CORNER OVERFLOW DEFLECTOR

FIELD OF THE INVENTION

The present invention relates to an eaves trough or gutter, and more particularly, relates to an improvement in such structures.

BACKGROUND OF THE INVENTION

Gutters or eaves troughs are widely used on many building structures and in particular for residential buildings. The gutters or eaves troughs are designed to catch the rain falling on a sloping roof and transport the water to a down spout where it may be safely discharged away from the house's foundation.

Generally, such systems work as they are designed to. However, occasionally problems are encountered due to a larger volume of water - i.e. the capacity of the gutter is exceeded. This can occur particularly when a so-called gutter shield or guard is utilised. In such an arrangement, the apertures in the guard naturally reduce the rate of transmission of the rain water to the eaves troughs. This problem is further accentuated when the roof or structure has a valley structure which is a frequent occurrence in residential structures. Thus, the volume of water is increased and concentrated at one location. Accordingly, there is an overflow which occurs.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a gutter corner overflow deflector which helps overcome the problem of gutters or eaves troughs overflowing when a valley in the roof occurs.

According to one aspect of the present invention, there is provided a corner deflector suitable for use with a gutter, the corner deflector comprising a generally planar member

having an upper edge and a lower edge, the member having first and second segments, the first and second segments being separated by a fold line, the fold line extending from the top edge to the bottom edge and at least one flange extending outwardly from the bottom wall of each of the segments, the flange extending outwardly in a direction substantially perpendicular to the planar portion.

According to a further aspect of the present invention., there is provided an eaves trough having a gutter guard associated therewith, the guard comprising a foraminous member covering a top of the gutter and wherein the gutter has two mutually perpendicular sections, the improvement comprising a corner deflector, the corner deflector having a first segment and a second segment, a fold line separating the first and second segments, the first and second segments lying in mutually perpendicular planes, at least one inwardly extending flange and one outwardly extending flange being located along a bottom edge of each of the segments, the inwardly extending flanges being secured to the gutter guards.

The corner deflector of the present invention may be formed of any suitable material and would conveniently be manufactured either of a metallic or plastic material. Thus, both materials are known for use in gutters and one may then use either a similar or dissimilar material.

The corner deflector of the present invention is particularly suited to use with eaves troughs or gutters having a guard member lying on the top thereof. The guard member is usually a piece of material having a plurality of apertures extending theretrough and is designed to protect the eaves trough or gutter from extraneous material such as leaves and the like. In one particular embodiment, the corner guard of the present invention is particularly suited for use with a structure such as is shown in co-pending U.S. Application 10/261,043,

the teaching of this application being incorporated herein by reference.

BRIEF DESCRIPTION OF THE DRAWINGS

Having thus generally described the invention, reference will be made to the accompanying drawings illustrating an embodiment thereof, in which:

Figure 1 is a perspective view of a portion of a roof and an eaves trough structure having the corner guard of the present invention;

Figure 2 is a perspective view of the corner guard;

Figure 3 is a side elevation view, partially in section, of the gutter corner guard of the present invention placed on an eaves trough; and

Figure 4 is a top plan view of a gutter having the corner guard of the present invention thereon.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings in a greater detail and by reference characters thereto, there is illustrated in Figure 1 an arrangement utilising the deflector of the present invention. Thus, there is provided a roof generally designated by reference numeral 10 and which has a plurality of shingles 12 thereon in a conventional arrangement. Roof 10 is constructed such that a valley 14 is formed between two roof sections.

A gutter generally designated by reference numeral 16 is secured to the fascia F of the roof. Gutter 16 has a back wall 18, a bottom wall 20, and a front wall generally designated by reference numeral 22. At the upper edge of front wall 22, there is provided a top wall 24 and which terminates in an inwardly extending flange 26.

Extending over gutter 16 is a gutter guard generally designated by reference numeral 28 and which gutter guard includes a central planar portion 30 having a plurality of apertures

32 formed therein. A side wall 34 extends upwardly from gutter guard 28 and screws 36 are used to attach gutter guard 28 and gutter 16 to the building structure under fascia F.

The corner deflector of the present invention is generally designated by reference numeral 40. Corner deflector 40 has a first segment 42 and a second segment 44 which are separated by a fold line 46. Each segment 42, 44 has a top edge 48, 50 respectively. As may be seen in the drawings, top edges 48 and 50 are arcuate in nature to provide a pleasant aesthetic appearance.

First segment 42 includes an inner flange 52 and an outer flange 54 formed along a bottom edge thereof. Similarly, second segment 44 includes an inner flange 56 and an outer flange 58. As may be seen in Figure 3, outer flanges 54 and 58 are designed to fit under flange 26 extending from top wall 24 of the gutter 16 and to thereby be secured in place. Inner flanges 52 and 56 are secured to central planer portion 30 by means of screws 60.

As will be appreciated, the above arrangement provides a corner deflector 40 which may be easily assembled and secured to the gutter 16 and associated components. The installer will have little trouble doing so and it provides a method of overcoming the problems at the valleys in the roof.

It will be understood that the above described embodiment is for purposes of illustration only and that changes and modifications may be made thereto without departing from the spirit and scope of the invention.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A corner deflector suitable for use with a gutter, said corner deflector comprising:
a generally planar member having an upper edge and a lower edge, said member having first and second segments, said first and second segments being separated by a fold line, said fold line extending from said top edge to said bottom edge; and
at least one flange extending outwardly from said bottom wall of each of said segments, said flange extending outwardly in a direction substantially perpendicular to said planar portion.
2. The corner deflector of Claim 1 wherein each of said segments has one inwardly extending flange and one outwardly extending flange extending from said bottom edge.
3. The corner deflector of Claim 2 wherein said first segment and said segment are symmetrical about said fold line.
4. The corner deflector of Claim 2 wherein said deflector is formed of a metallic material.
5. The corner deflector of Claim 2 wherein said top edge has a arcuate outline.
6. In an eaves trough having a gutter guard associated therewith, said guard comprising a foraminous member covering a top of the gutter and wherein said gutter has two mutually perpendicular sections, the improvement comprising a corner deflector, said corner deflector having a first segment and a second segment, a fold line separating said first and second segments, said first and second segments lying in mutually perpendicular planes;
at least one inwardly extending flange and one outwardly extending flange being located along a bottom edge of each of said segments, said inwardly extending flanges being secured to said gutter guards.

7. The improvement of Claim 6 wherein said corner deflector is formed of a metallic material.
8. The improvement of Claim 6 wherein said first and second segments are symmetrical about said fold line.
9. The improvement of Claim 6 wherein each of said first and second segments has an upper edge which an arcuate configuration.

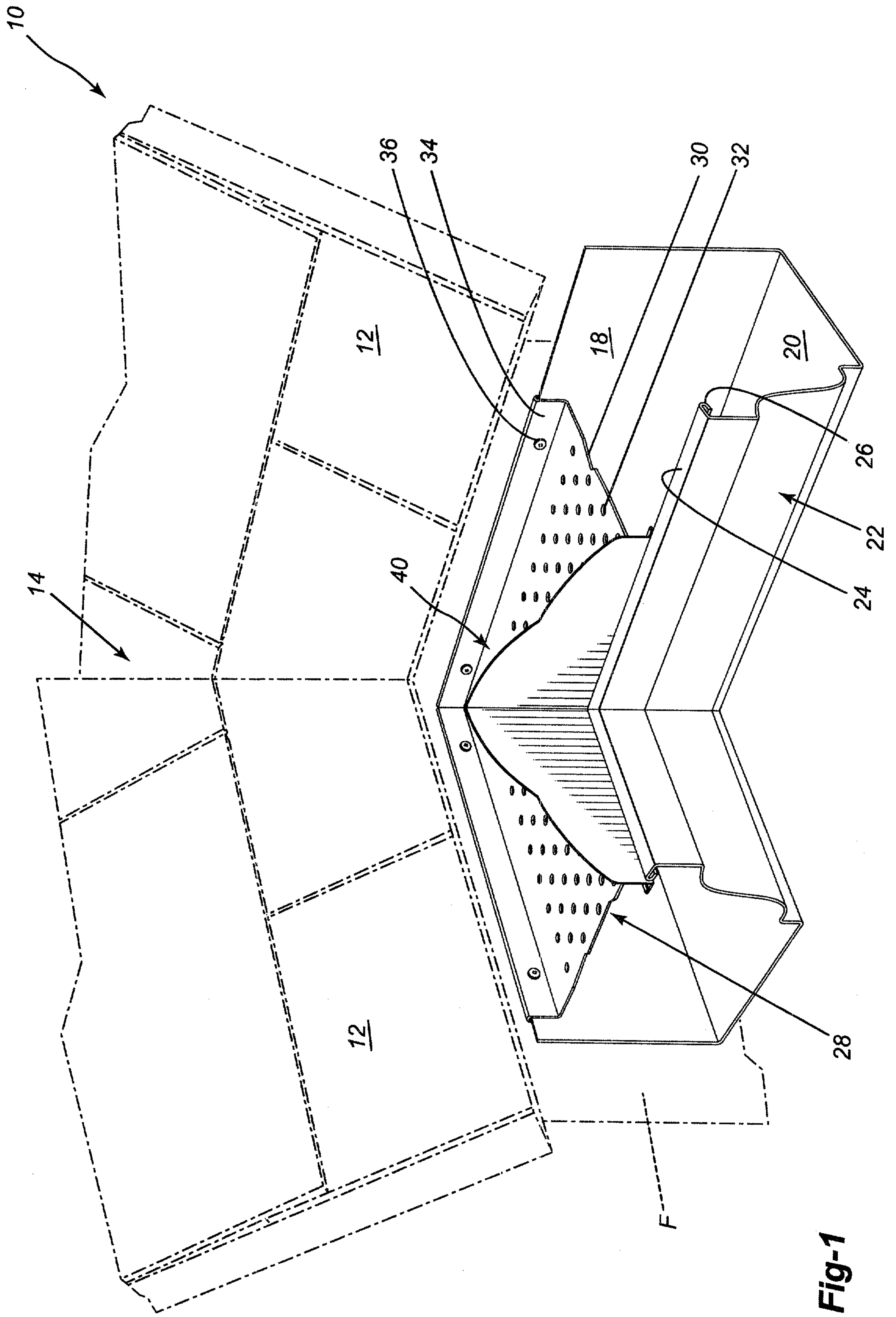
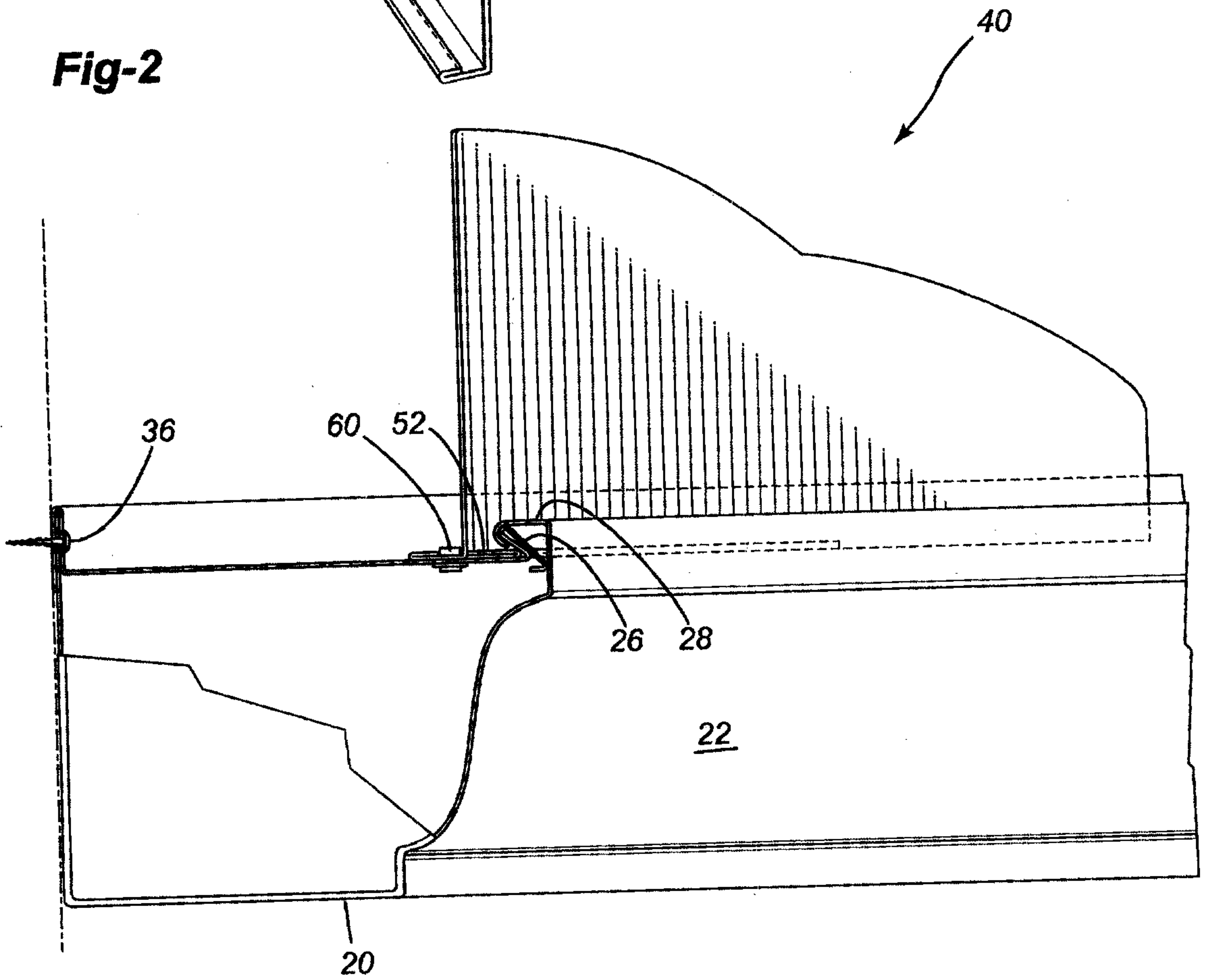
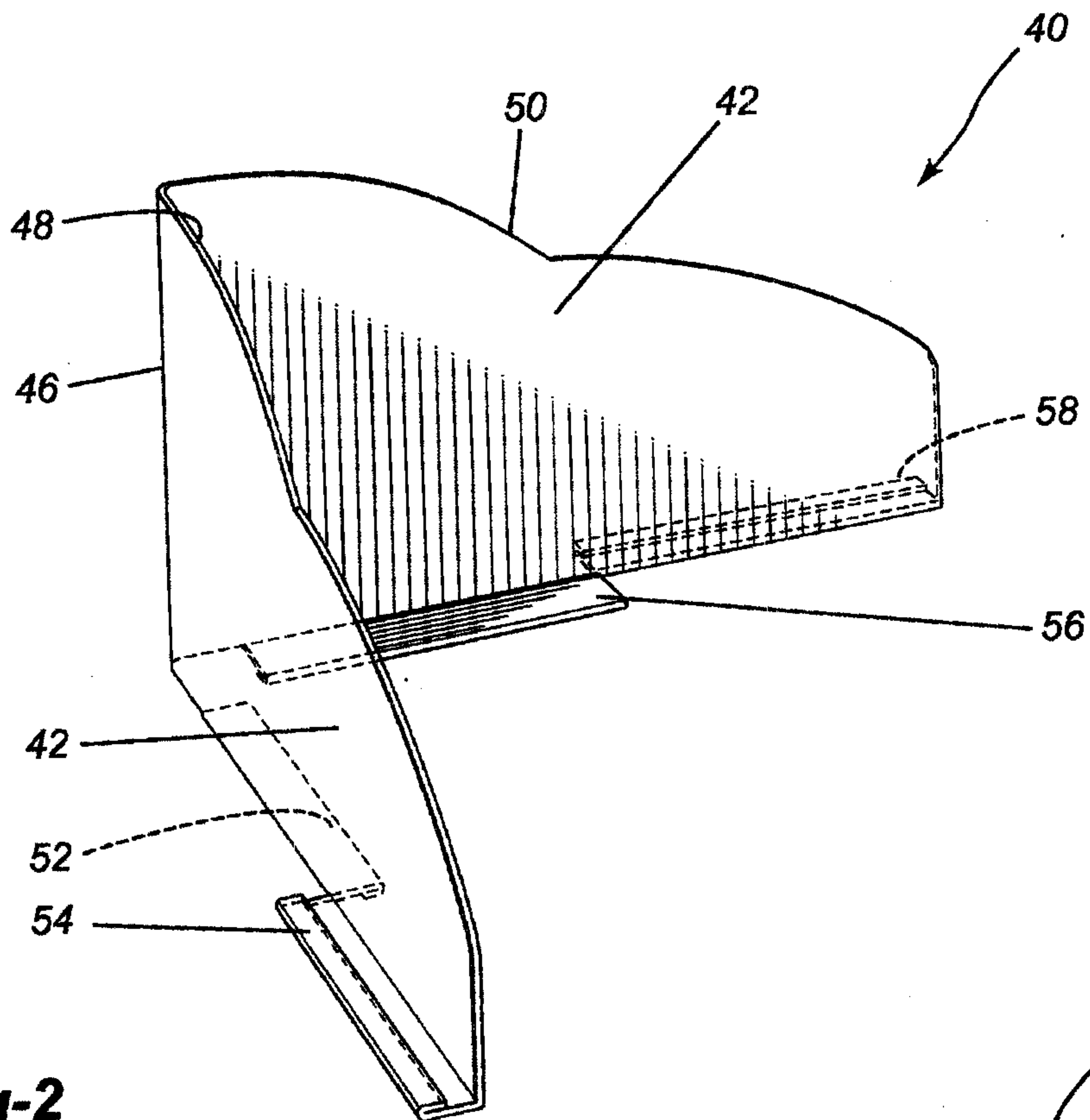


Fig-1



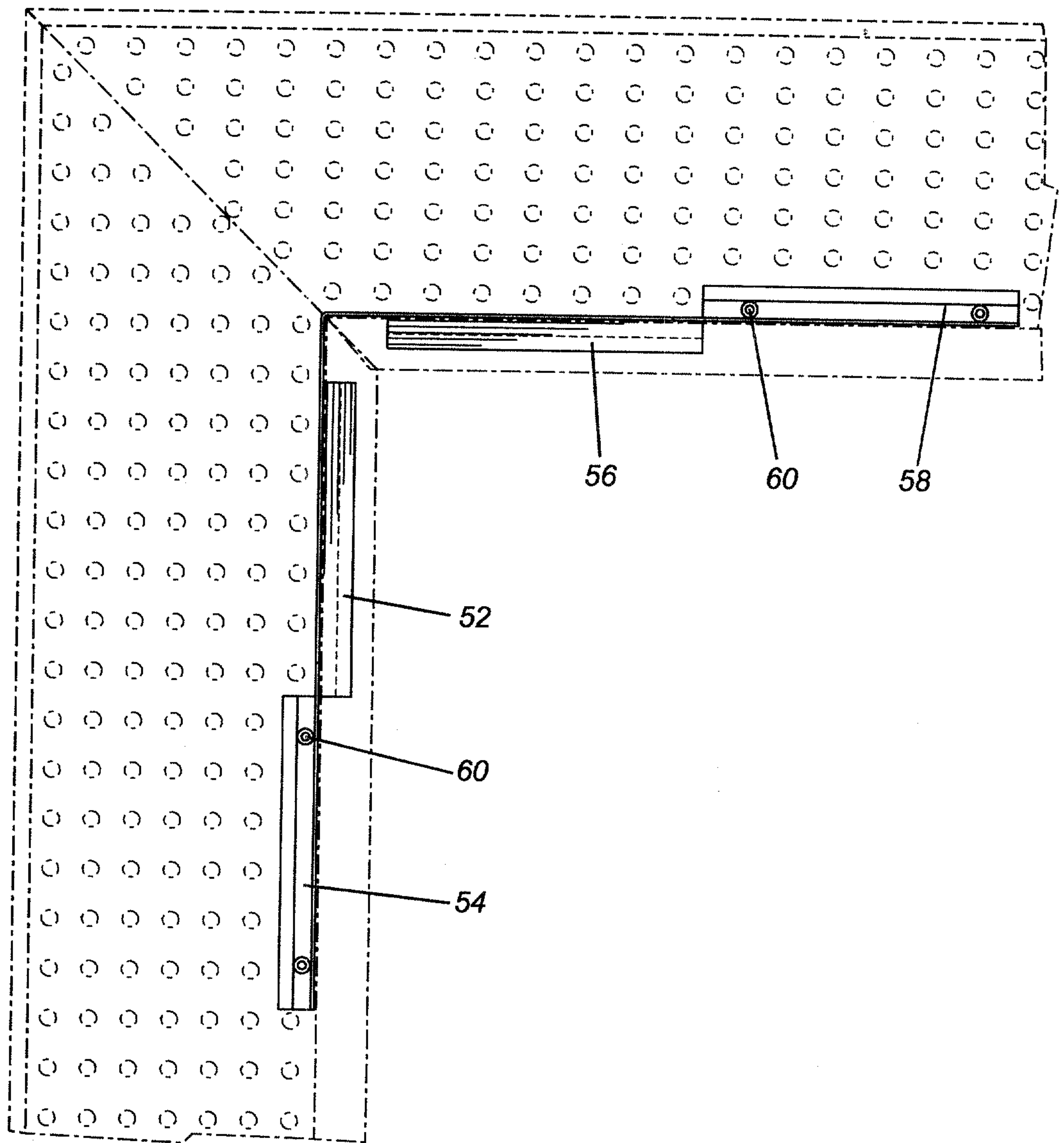


Fig-4

