Sept. 6, 1932. F. J. MOORE 1,875,640

ROOF FLASHING AND JACKET

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Fig. 1

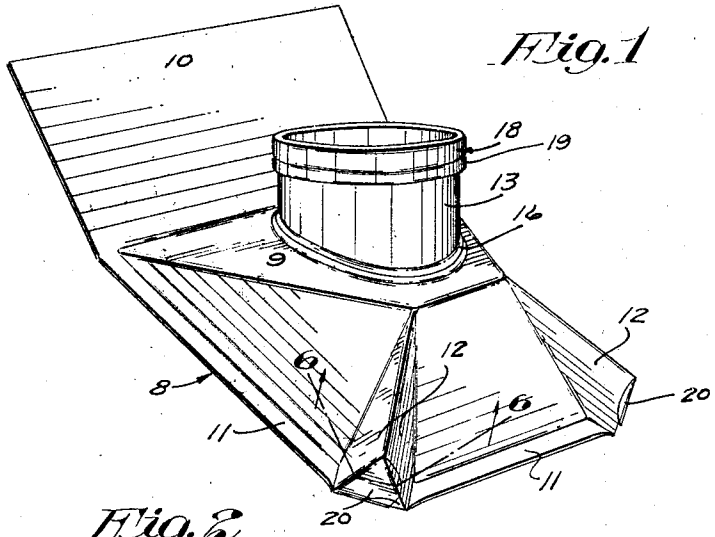


Fig. 2

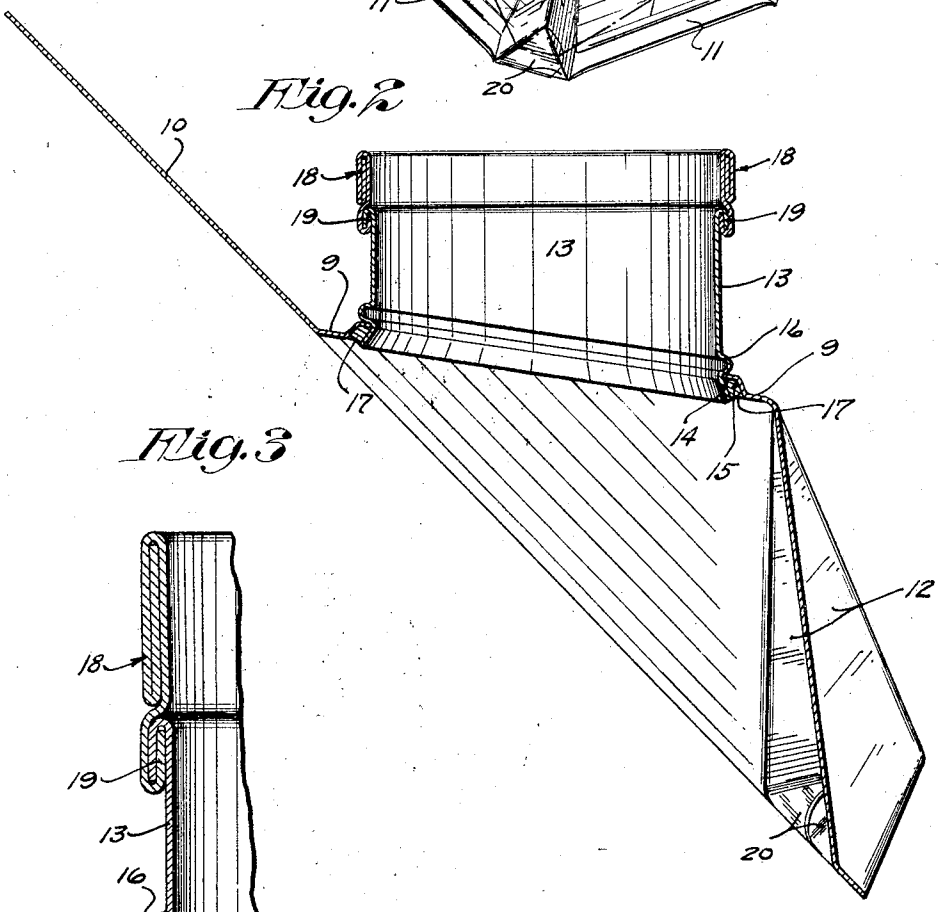


Fig. 3

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Fig. 4

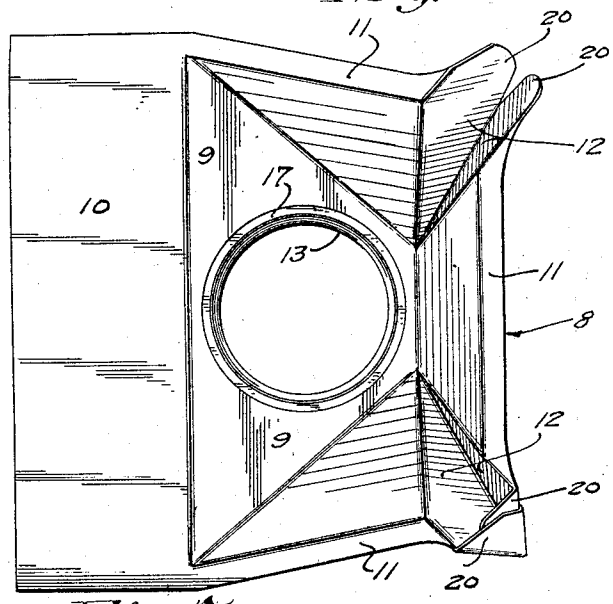


Fig. 7

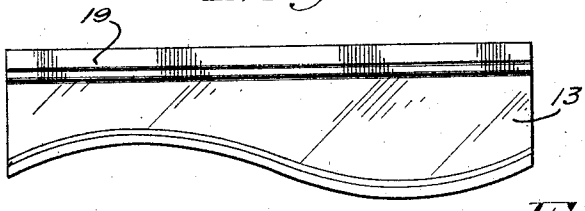


Fig. 5

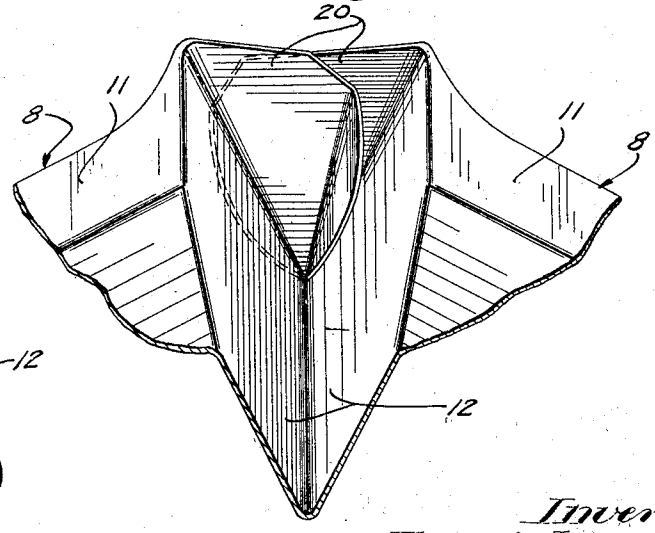
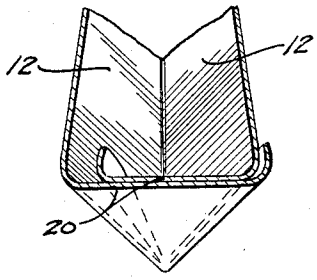


Fig. 6



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UNITED STATES PATENT OFFICE

FRANCIS J. MOORE, OF MINNEAPOLIS, MINNESOTA

ROOF FLASHING AND JACKET

Application filed May 11, 1931. Serial No. 536,438.

My present invention relates to improvements in roof flashings and jackets for vent pipes of the type disclosed and broadly claimed in my United States Letters Patent "Roof flashing and jacket for vent pipes" #1,279,572 issued of date September 24, 1918, and wherein the flashing is bendable to change the inclination of the jacket in respect to the flashing for roofs of different pitch.

In the commercial form of flashing and jacket gussets are formed in the vertical corners of a raised central portion in the flashing to which the jacket for a vent pipe is secured. These gussets are outwardly and transversely bulged to permit the same to be spread or contracted to change the pitch of the central portion of the flashing, and hence, the jacket. The lower ends of these gussets are open to rain or snow with a resulting leakage and hence decay and they further permit an accumulation of dirt and a refuge for insects, bats and the like.

The object of the present invention is to close the lower ends of the gussets at the time of manufacture and in a manner that will permit free spreading or contracting of the gussets without affecting the complete closing of the open ends thereof.

The invention further provides simple and highly efficient means for securing the jacket to the flashing and the application of a calking collar to the jacket to form a weather tight joint between said jacket and a vent pipe extended therethrough.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a perspective view of the improved flashing and jacket;

Fig. 2 is a view of the same in longitudinal central section, on an enlarged scale;

Fig. 3 is a fragmentary detail view in section taken vertically through the jacket, connected portion of the flashing and the calking collar;

Fig. 4 is a bottom plan view of the invention, as shown in Fig. 1;

Fig. 5 is a fragmentary perspective view looking at the closed end of one of the gussets from the inside thereof;

Fig. 6 is a fragmentary detail view in section taken on the line 6—6 of Fig. 1; and

Fig. 7 is a plan view of the connected jacket and calking collar before rolled into shape and connected.

The numeral 8 indicates an inclined flashing for a pitch roof and has an upwardly pressed central portion 9 arranged to leave the flashing 8 with a wide upper flange 10 and a narrow marginal front and side flange 11. Said wide flange 10 is adapted to be inserted under the shingles or roof covering and nailed to the roof while the narrow flange 11 is adapted to rest on the roof covering and be nailed thereto to form a weather tight joint between said covering and flashing 8.

The top of the raised central portion 9 has a much flatter pitch than the flashing 8 and said central portion, at its two vertical corners, is folded to form gussets 12. These gussets 12 are outwardly and transversely bulged to substantially the form of inverted V's, whereby the sides thereof may be spread or contracted to change the inclination of the central portion 9 in respect to the flashing 8.

A short upright cylindrical jacket 13 for a vent pipe, not shown, is secured to the central portion 9 by having its lower end portion telescoped into an annular opening 14 in said central portion.

The central portion 9 surrounding the opening 14 is outwardly pressed to form an annular groove 15 between said portion and the jacket 13. An external annular bead 16 pressed from the jacket 13 rests on the central portion 9 and supports the jacket 13 therefrom. The jacket 13 below the opening 14, after being telescoped therethrough, is outwardly pressed and flared to lock the jacket 13 to the flashing 8. Solder 17 is flowed in the groove 15 at the time of manufacture and forms a continuous ring that rigidly connects the flashing 8 and jacket 13 and forms a water tight joint therebetween, see Fig. 3.

A calking collar 18 formed from a relatively soft sheet of lead or other ductile metal forms an extension of the jacket 13 at its upper end. The folding of the sheet of ductile metal is such as to form a three ply collar and the inner ply thereof extends laterally outward between the upper end of the jacket 13 and collar 18 and then laterally downward around said jacket. Said collar 18 is rigidly secured to the jacket 13 by two interlocked seams 19 one of which is formed by folding the upper portion of the jacket 13 outward upon itself and the other is formed by folding the inner ply of the collar 18 inward upon itself. The collar 18 by its engagement with the upper end of the jacket 13 rigidly holds the seams 19 interlocked and with the inner face of said collar substantially flush with the inner face of the jacket 13.

In the manufacture of the jacket 13 and its calking collar 18 said collar is first folded and the seams 19 interlocked while said collar and the jacket 13 are flat, as shown in Fig. 7. After the attachment of the collar 18 to the jacket 13 the same are rolled to cylindrical form and the abutting edges connected by solder or otherwise.

The internal diameter of the calking collar 18 is slightly larger than the vent pipe in connection with which the jacket 13 is used and to form a tight joint between the calking collar 18 and vent pipe, said collar is upset by pounding the same onto the jacket to form a tight joint therebetween.

To close the open lower ends of the gussets 12 the lower end portions thereof are longitudinally slit at their crowns and the sides of each gusset 12 are bent laterally inward into overlapping engagement to form a pair of ears 20. The outer end portions of the ears 20 are rounded and folded the ears of the outer pair over the exterior of one of the sides of the gussets 12 and the ears of the inner pair over the interior of the other sides of said gussets. The ears 20 of each pair are free to slide, the one upon the other, during the spreading or contracting of the gussets 12 to change the inclination of the jacket 13 in respect to the flashing 8. In case of extreme expansion or contraction of the gussets 12 the roller outer ends of their ears 20 will engage the respective sides of the gussets 12 and slide thereon, thus causing the ears of each pair to slightly separate but without forming a direct passage therethrough.

What I claim is:

1. An inclined flashing and a vent pipe jacket secured thereto, said flashing having a vertical gusset that is outwardly and transversely bulged to permit the gusset to be spread or contracted to change the inclination of the jacket, said gusset being folded to close the lower open end thereof with freedom to permit the gusset to be spread or contracted.

2. An inclined flashing and a vent pipe jacket secured thereto, said flashing having a vertical gusset that is outwardly and transversely bulged to permit the gusset to be spread or contracted to change the inclination of the jacket, the lower end portions of the sides of the gusset being folded, the one upon the other, to close the open lower end of the gusset, said folded side portions of the gusset being free to slide, the one upon the other, and permit the gusset to be spread or contracted.

3. An inclined flashing and a vent pipe jacket secured thereto, said flashing having a vertical gusset that is outwardly and transversely bulged to permit the gusset to be spread or contracted to change the inclination of the jacket, the gusset at its crown and lower end portion being longitudinally slit and the sides thereof being extended to form a pair of ears that are folded, the one upon the other to close the open lower end of the gusset, said ears being free to slide, the one upon the other, and permit the gusset to be spread or contracted.

4. The structure defined in claim 3 in which the outer end of the outer ear is folded over the exterior of one of the sides of the gusset and in which the outer end of the inner ear is folded over the interior of the other side of the gusset.

5. An inclined flashing having an outwardly extended central portion with a flatter pitch than the flashing, a vent pipe jacket secured to said central portion, outwardly and transversely bulged gussets in the vertical corners of said central portion and adapted to be spread or contracted to change the inclination of said central portion, the gussets at their crowns and lower end portions being longitudinally slit and the sides extended to form pairs of ears, the ears of each pair being folded, the one upon the other, to close the open lower ends of the gussets, the ears of each pair being folded to slide, the one upon the other, and permit the gussets to be spread or contracted.

6. The combination with a flashing having a raised central portion provided with an annular opening, of a cylindrical vent pipe jacket, the lower end portion of which is telescoped through said opening, the flashing surrounding the opening being upwardly offset to form a groove between the flashing and jacket, and a ring of solder in the groove rigidly connecting the flashing and jacket.

7. The structure defined in claim 6 in which the jacket has an outstanding annular bead which overlies and contacts the groove forming portion of the flashing.

8. A vent pipe jacket having a calking collar that forms an extension thereof, said collar being formed from a sheet of ductile metal

folded upon itself and pressed together to produce three plies, the inner ply of said metal being extended outwardly between the jacket and collar and then downward around the jacket and secured thereto by interlocked seams formed with said jacket and collar, said collar by its engagement with the upper end of the jacket holding the seams interlocked.

In testimony whereof I affix my signature.

FRANCIS J. MOORE.