Aug. 19, 1941. B. H. BILL 2,253,105

COMBINATION METALLIC AND INSULATION SHINGLE

Filed March 15, 1940

Fig. 1.

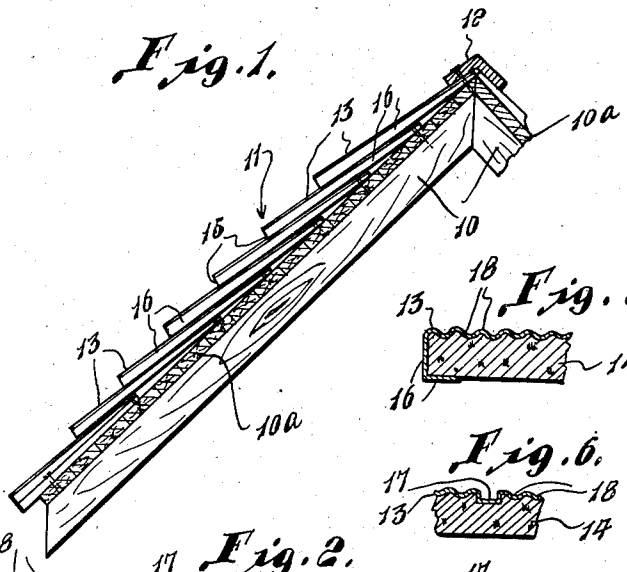


Fig. 5.

Fig. 6.

Fig. 4.

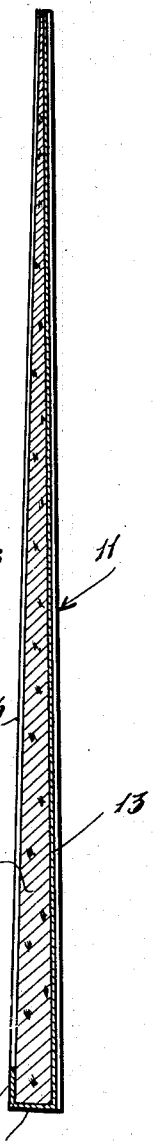
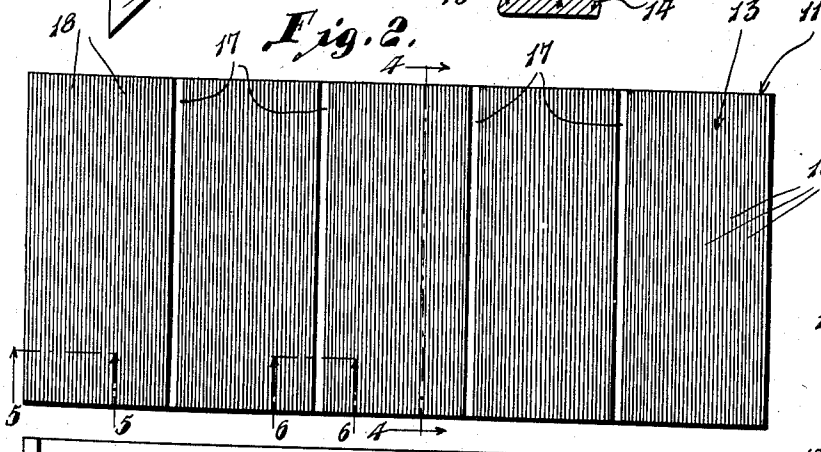


Fig. 2.



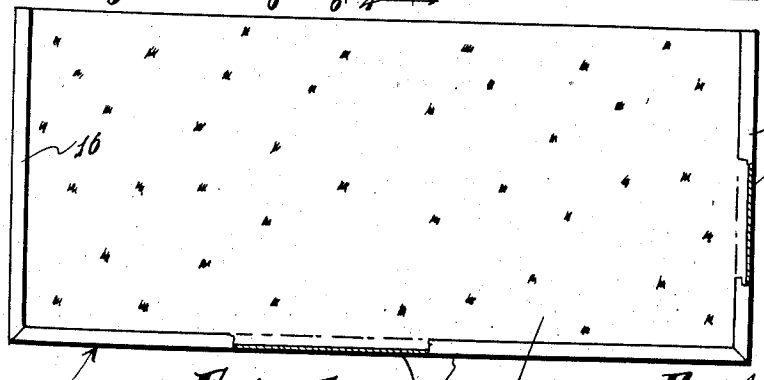


Fig. 3.

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COMBINATION METALLIC AND INSULATION SHINGLE

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Application March 15, 1940, Serial No. 324,217

2 Claims. (Cl. 108—8)

This invention relates to certain new and useful improvements in combination metallic and insulation shingle.

The primary object of the invention is to provide a combination metallic and insulation shingle wherein the shingle may be constructed of any size or shape desired, the same being preferably in the form of a relatively large plate comprising a thin metallic outer wall and a backing of insulation material, such as cork or fireproof substance with the relatively large metallic plate designed or grooved to simulate a plurality of relatively smaller shingles.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing:

Figure 1 is a fragmentary sectional view of the ridge portion of a roof with the shingles forming the present invention, laid upon the sheathing;

Figure 2 is an outer face view of a shingle plate with the outer metallic side grooved to represent a series of shingles;

Figure 3 is an inner face view of the combination shingle showing the cork or insulation lining for the outer metallic plate, parts of the marginal flanges of the outer metallic plate being broken away and shown in section;

Figure 4 is a vertical sectional view taken on line 4—4 of Figure 2;

Figure 5 is a detail sectional view taken on line 5—5 of Figure 2, showing the outer metallic plate of the shingle having its side edge bent to enclose the side edge of the insulation part of the shingle; and

Figure 6 is a detail sectional view taken on line 6—6 of Figure 2, showing the grooves in the outer metallic plate of the shingle to give the impression of separate shingles.

Referring more in detail to the accompanying drawing, there is illustrated in Figure 1, a portion of a roof structure including upwardly inclined rafters with sheathing 10a laid thereon and upon which the combination metallic and insulation shingles designated in general by the reference character 11 are laid, the peak of the roof carrying the usual angular ridge plate 12.

While the combination shingle may be constructed in any size and shape desired, the same for purposes of illustration has been shown as of oblong formation in Figures 2 and 3 and comprises an outer metallic plate 13 and an inner lining plate 14 of cork, insulation or fireproof material, the lining plate 14 preferably being of tapering formation as illustrated in Figure 4, to facilitate laying of the shingle plate. To retain the outer metallic plate and the inner lining plate 14 in assembled relation, the lower edge of the outer metallic plate carries a channel flange 15 positioned at the rear side of the plate, while a channel flange 16 is carried by opposite side edges of the outer metallic plate with said flanges 15 and 16 enclosing the adjacent edges of the lining plate 14.

The combination shingle is of the monolithic type and to give the impression of a plurality of shingles, the outer metallic plate 13 may be treated in different ways, such as by forming at spaced intervals, a series of relatively deep grooves 17 as shown in Figures 2 and 6, and the outer metallic plate 13 between said grooves 17 may be suitably ornamented further to enhance the appearance of single shingles in any preferred manner, such as by longitudinal corrugations 18 shown in Figures 2 and 5 which may only extend throughout substantially one-half the length of the shingle if desired.

The monolithic combination shingle plate may be laid in customary shingle fashion as indicated in Figure 1 with a great saving of time, with the finished roof structure giving the appearance of the usual relatively small shingles.

While there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:

1. In a combination shingle of the character described, an outer wall of sheet metal and an inner wall of fireproof material, channel flanges on the side and bottom edges of the outer metallic wall inclosing adjacent edges of the inner wall to retain the walls in assembled relation, the shingle being of monolithic character and the outer metallic wall of the shingle having a series of spaced well defined grooves to simulate a plurality of smaller shingles, and the spaces between said grooves being longitudinally corrugated.

2. In a combination shingle of the character described, an outer wall of sheet metal and an inner wall of fireproof material, channel flanges on the side and bottom edges of the outer metallic wall inclosing adjacent edges of the inner wall to retain the walls in assembled relation, the shingle being of monolithic character and the outer metallic wall of the shingle having a series of spaced well defined grooves to simulate a plurality of smaller shingles, and the spaces between said grooves being longitudinally corrugated throughout substantially the lower half of the shingle.

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