Sept. 21, 1937. R. C. HARRINGTON 2,093,722

SHINGLE

Filed May 3, 1937

Fig. 1.

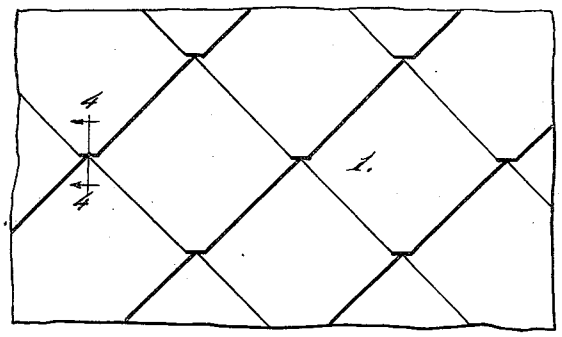


Fig. 4.

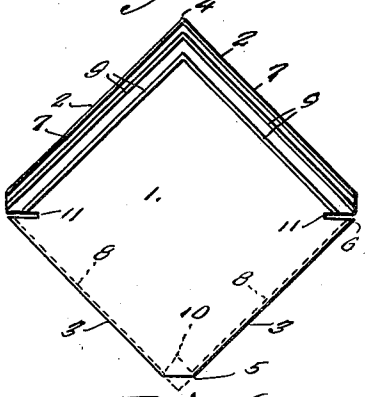
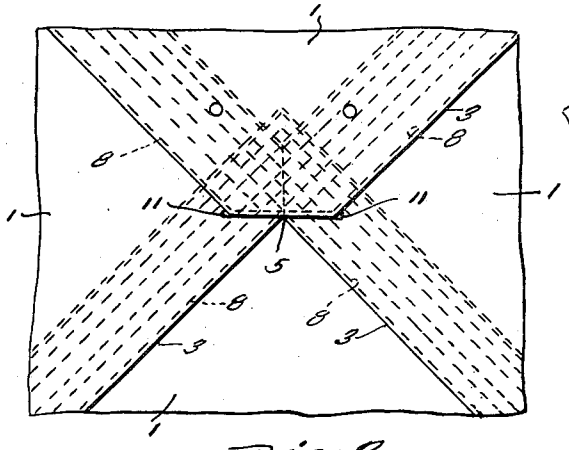


Fig. 2.



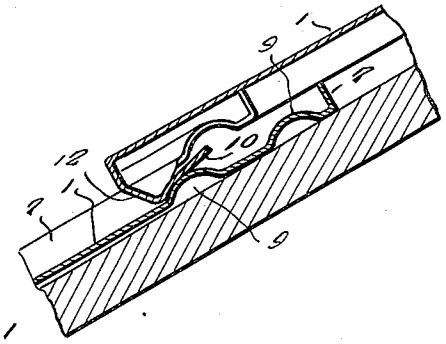
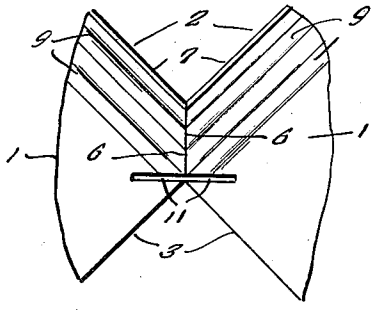


Fig. 3.



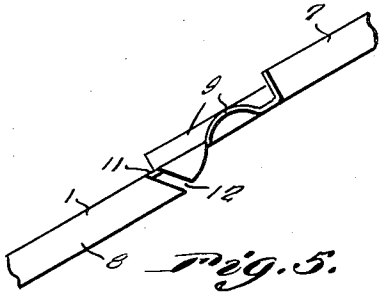


Fig. 5.

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2,093,722

SHINGLE

Roy C. Harrington, San Antonio, Tex.

Application May 3, 1937, Serial No. 140,497

2 Claims. (Cl. 108—17)

My invention relates to improvements in roofing shingles of the type disclosed in my co-pending application, Serial No. 71,946, filed March 31, 1936, and over which the present invention is designed as an improvement.

In my co-pending application, above designated, I have disclosed a sheet metal roofing single of the diamond-shaped type designed to be laid cornerwise in interlocking relation with subjacent shingles.

The principal object of my present invention is to provide a shingle of the general type disclosed in my application, supra, but equipped with improved means for interlocking with other singles, the improvements being directed toward accomplishing the interlocking by relative camming of interlocking parts of the shingles into locking relation.

Another object is to provide a shingle of the type above identified, adapted to interlock with other shingles in clamping relation thereto and against relative vertical movement.

Other and subordinate objects are also comprehended by my invention, all of which, together with the exact nature of my improvement, will be readily understood when the following description and claims are read with reference to the drawing accompanying and forming part of this specification.

In said drawing:

Figure 1 is a fragmentary view in top plan illustrating the manner in which the shingle of my invention is laid,

Figure 2 is a similar view, drawn to an enlarged scale, and illustrating in detail the relation of one shingle to subjacent shingles,

Figure 3 is another fragmentary view in top plan illustrating the corner construction of the shingle, and an interlocking slot with which the shingle is provided,

Figure 4 is a view in transverse section taken on the line 4—4 of Figure 1, looking in the direction indicated by the arrows and drawn to an enlarged scale,

Figure 5 is a fragmentary view in edge elevation of the shingle, and,

Figure 6 is a view in top plan of the shingle.

Referring to the drawing by numerals, the shingle 1 of my present invention, as in the case of that of my co-pending application, is of sheet metal, substantially diamond-shaped, and designed to be laid cornerwise to provide upper and lower pairs of side edges 2 and 3, respectively, convergent in each instance, and top, bottom and side corners 4, 5 and 6, respectively, the latter being straight vertically. The upper side edges are each provided with an upturned right angled marginal flange 7, and the lower side edges with a similar down-turned flange 8 respectively.

Extending along the flanges 7 parallel therewith are two courses of parallel strengthening and water deflecting ribs 9 punched upwardly in the shingle 1 and intersecting the side corner 6 all as shown in Figure 1.

Coming now to the interlocking feature, the bottom corner 5 of the shingle is formed with a normally depending bendable V-shaped locking tab 10 formed by bending said corner downwardly. A pair of slots 11 are formed in the side edges 3 of the shingle, respectively, immediately below the side corners 6, said slots extending inwardly of said edges parallel with the transverse median line of the shingle. A pair of slots 12 formed in the side flanges 8, respectively, extending rearwardly and upwardly from the edges of said flanges to the outer ends of the slots 11, and forming oblique camming continuations of the latter.

As will be clear from an inspection of Figures 2 and 3, particularly, the shingles are laid in transverse overlapping rows with the corners 6 of contiguous shingles in a row abutting and the flanges 7 of one row overlapping the upper edges of the shingles in a subjacent row below the lower course of ribs 9 to cover the latter from view. In this position, the slots 11 in adjacent shingles 1 of each row are horizontally aligned in mating relation with the mouths of the slots 12 opening onto the lower shingles just below the inner course of ribs 9 of a subjacent shingle, which ribs form a right-angled abutment below and in front, or above, said slots 12.

The tab 10 of a shingle is adapted to interlock in the mating slots 11 and 12 of a pair of subjacent shingles as follows. The tab 10 is inserted into said mating slots 11 and the shingle pressed downwardly at that point. Under such pressure said tab is bent and cammed forwardly under the subjacent pair of shingles first by the oblique slot 12 and second by engagement of the point of the tab with the before-mentioned right-angled abutment formed by the lower course of ribs 9 on a shingle subjacent to said pair. As best shown in Figure 4, said abutment cams the end of the tab 10 upwardly thereby interlocking the shingle from which said tab depends with the shingles of the subjacent pair. It will be observed that the described interlocking relation clamps the interlocked shingles together against vertical movement.

My invention will, it is believed, be clearly understood from the foregoing description, without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept disclosed and right is herein reserved to all such modifications falling within the scope of the claims appended hereto.

What I claim is:

1. A metal roofing shingle comprising a diamond-shaped body portion having upper and lower pairs of convergent side edges, respectively, and upper, lower and side corners, respectively, the latter being vertically straight, and having a pair of slots extending inwardly thereof, respectively, a pair of downturned marginal flanges extending along said lower side edges, respectively, and having a pair of inwardly extending slots therein, respectively, inclining from the outer ends of the slots of said first-mentioned pair and forming continuations thereof, and a downturned bendable tab on the lower corner of said shingle.

2. A metal roofing shingle comprising a diamond-shaped body portion having upper and lower pairs of convergent side edges, respectively, and upper, lower and side corners, respectively, the latter being vertically straight and having a pair of slots extending inwardly thereof, respectively, a pair of downturned marginal flanges extending along said lower side edges, respectively, and having a pair of inwardly extending slots therein inclining from the outer ends of the slots of said first mentioned pair, respectively, and forming continuations thereof, a downturned bendable tab on the lower corner of said shingle, and a pair of upstanding convergent beads extending along the upper side edges, respectively, parallel therewith and intersecting said side corners.

ROY C. HARRINGTON.