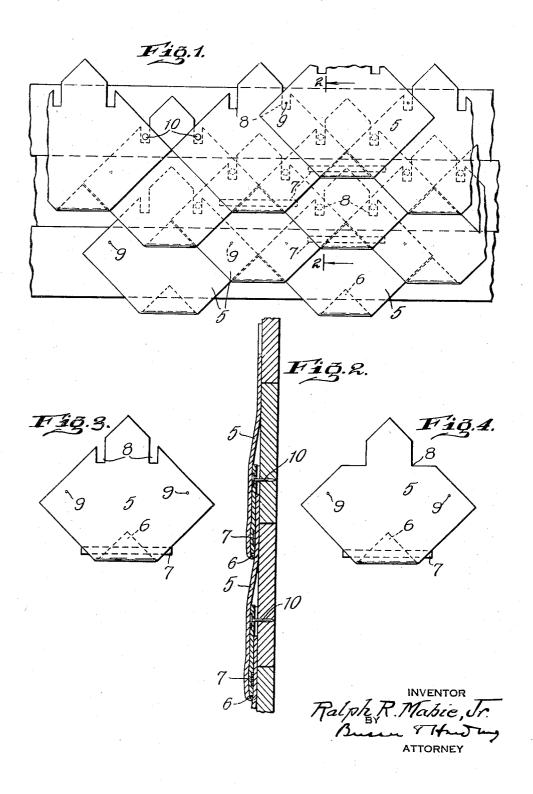
SHINGLE

Original Filed June 1, 1937



## UNITED STATES PATENT OFFICE

## 2,201,442

## SHINGLE

Ralph R. Mabie, Jr., Santa Monica, Calif.

Continuation of application Serial No. 145,743, June 1, 1937. This application August 1, 1939, Serial No. 287,694

5 Claims. (Cl. 108—7)

This invention relates to composition shingles. In the development of the art the use of a composition shingle, of a flexible or semi-flexible type, waterproof, and fireproof, has become quite common.

In the laying of a roof the common practice is to have supporting rafters usually disposed at an angle to a horizontal plane, and to cover such rafters with transverse roofing boards. The roof-10 ing boards and the rafters are sawn from more or less uncured or unseasoned material so that there is considerable contraction of the supporting elements such as the rafters and roofing boards. When composition shingles are laid on such con-15 struction the contraction of the construction causes the shingles to buckle.

One object of the invention is to provide a shingle of the composition type which when laid in courses will permit the contraction of the 20 rafters and roofing boards without causing a buckling of the shingles.

A further object of the invention is to provide an indication on a shingle where a securing device, such as a shingle nail, may be driven through 25 and so that the securing device passes through only one layer of shingles.

Ordinarily, shingles of the type to which this invention relates are made approximately rectangular in shape and it is common practice, as 30 shown for instance in the patents to Griswold, Nos. 1,427,732 and 1,274,410, the lower corner of the rectangular shingle is folded inwardly and a securing strip is disposed between the body of the shingle and the inturned corner, so that the lower 35 edges of the shingles interlock with the next succeeding courses of shingles.

To permit the contraction of the roofing boards without buckling the shingle, or courses of shingles, I propose to cut away a portion of the upper corner of the rectangular shingle so that a securing device, such as a nail, may be driven through one shingle and through the cut-away portion of the next underlying shingle, so that when con-45 traction takes place in the roofing boards, the shingle will not buckle. Practical experience has shown that this result cannot be secured by the construction disclosed by Griswold.

In the accompanying drawing, forming a part 50 hereof, are illustrated two forms of the shingle, in which drawing similar reference characters designate corresponding parts, and in which:

Figure 1 is a plan view showing the application of the shingle to the roof boards;

Figure 2 is a vertical section taken approxi-

mately on line 2-2 of Figure 1, looking in the direction indicated by the arrows;

Figure 3 is a plan view of one form of the shingle: and

Figure 4 is a plan view of the modified form 5 of the shingle.

Referring to the drawing, 5 designates generally a composition, flexible or semi-flexible shingle, of general rectangular shape, the lower corner 6 of which is folded and a securing device 7, is 10 inserted between the body of the shingle and its folded portion 6, so that the securing member 7 will interlock with the lower edges of the next underlying course of shingles.

In order that a single securing device such as 15 a nail may be driven through one course and will permit the next underlying course to be contracted or expanded with the roof boards, a cutout portion 8 is made adjacent the upper edge of each shingle. In the form shown in Figure 2 this 20 cut-out portion 8 assumes the form of a pair of parallel slots, while in Figure 4 the cut-out portion 8 is merely a triangular cut-out.

In order that the roofer may know where to apply the nails so that they will pass through one 25shingle and into the cut-out portions 8, an indication 9 is applied to the shingle 5, which indication 9 may be a colored, visually observable spot, or it may be an indentation formed in the shingle.

A securing means may be the usual shingle nail 10 or any similar device.

The application is a continuation of my application Serial No. 145,743, filed June 1, 1937.

Having thus fully described the invention, what is claimed as new and desired to be secured by 35 Letters Patent is:

1. A flexible shingle of approximately rectangular shape and being adapted to be laid diagonally in overlying and underlying relation with other similar shingles, the said shingle being pro- 40 vided with cut-outs in its body adjacent the edges of the shingle forming the upper corner thereof as the shingle is laid, said cut-outs being spaced laterally of said corner and extending substantially vertically of the shingle as it is laid and having an area and extension vertically such as to permit the passage of fastening means for an overlying shingle and permit relative movement of the shingle and the fastening means for the overlying shingle when the shingle is laid 50 in overlying and underlying relation with other similar shingles.

2. A flexible shingle of approximately rectangular shape having one of its corners turned under and being adapted to be laid diagonally in 55

overlying and underlying relation with other similar shingles, the said shingle being provided with cut-outs in its body adjacent the edges of the shingle forming a corner thereof opposite to the turned under corner, said cut-outs being spaced laterally of said corner and extending substantially vertically of the shingle as it is laid and having an area and extension vertically such as to permit the passage of fastening means for an overlying shingle and permit relative movement of the shingle and the fastening means for the overlying shingle when the shingle is laid in overlying and underlying relation with other similar shingles.

3. A composition, flexible rectangular shingle provided with a lower corner and two upper edges and a securing means at its lower corner and provided with cut-out portions in its upper edges respectively at points on opposite sides of its vertical center line of a size to receive a fastening means for an overlying shingle and to permit free relative movement between the shingle and the fastening means for an overlying shingle.

4. A flexible composition-shingle roof comprising courses of shingles with interlocking lower corners and each provided with two upper edges and cut-out portions in its upper edges respectively at points on opposite sides of its vertical center line and securing nails passing through one course of the shingles and through the cut-out portions of the next underlying course, the cut-outs being of a size to permit free movement of the several courses independently.

5. A roof composed of horizontal overlapping courses of flexible plane shingles, said shingles having portions of their vertical upper parts cut away at points on opposite sides of their center lines and nails for securing the shingles respectively passing through the courses of shingles respectively and through the cut away portions of the shingles of adjacent courses, the cut-outs being of a size to permit free movement of each course independently when nailed to a roof.

RALPH R. MABIE, JR.