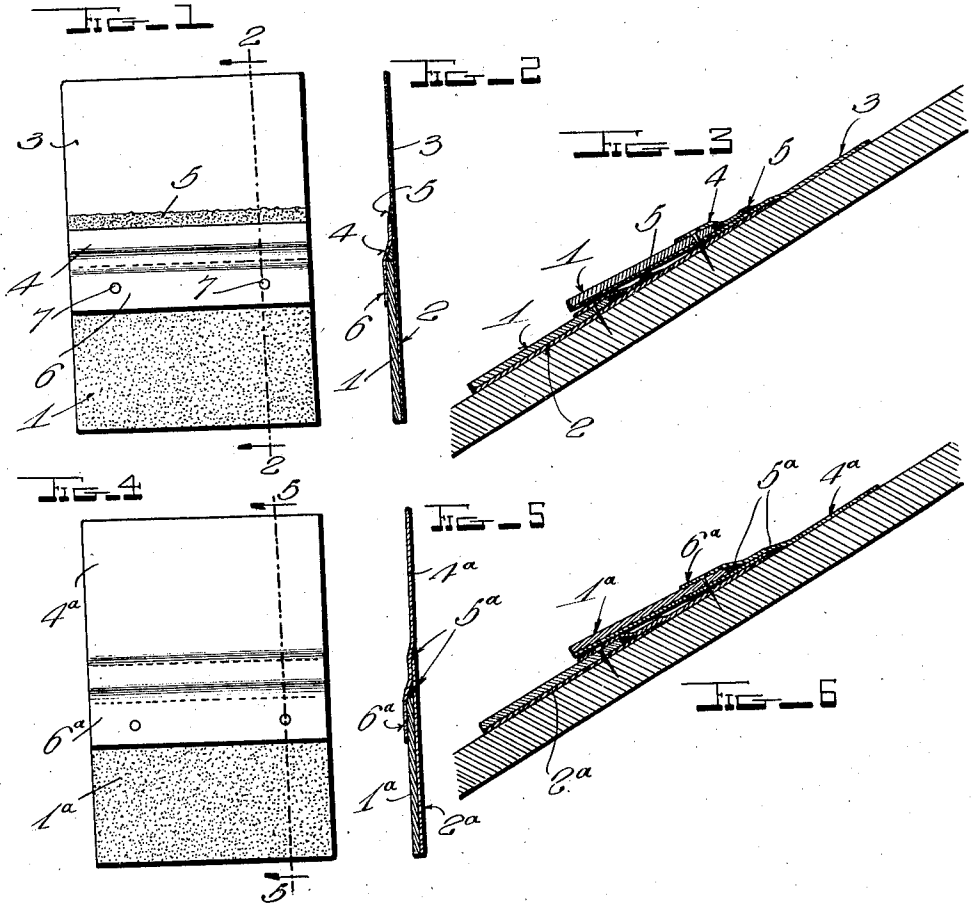
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COMPOSITE SHINGLE

Filed June 21, 1923



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UNITED STATES PATENT OFFICE.

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COMPOSITE SHINGLE.

Application filed June 21, 1923. Serial No. 646,899.

My invention relates to roofing units of the type embodying a shingle, and the present disclosure is directed to a shingle formed of slate or other fragile material, cemented or otherwise secured to the upper side of a backing sheet. When driving nails through the upper end portions of slate and similar shingles, the latter are often severely injured when the nail heads are driven tightly against their upper faces, but it is one object of my invention to provide a layer of flexible material secured to the upper side of the shingle to form a cushion for the nail heads and prevent them from being driven directly against the shingle, so that injury to the latter from said heads cannot occur.

A further object of the invention is to confine the nailing portion of the fragile shingle, between upper and lower layers of flexible material, so that in case the point or shank of the nail should fracture the shingle, such fracture will be sealed by said layers.

A still further object is to provide a shingle having unique means on its upper side to serve as a guide when applying the overlapping shingles thereto.

A still further object is to provide means on the upper side of the shingle for supporting the overlapping shingles so that the combined thickness of such overlapping shingles and said means will give the appearance that thick shingles have been used, when in reality said shingles may be comparatively thin.

A still further object is to provide a single strip-like layer across the upper side of the shingle, to constitute said cushioning means, said shingle supporting means and the means for guiding the laying of the overlapping shingles.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawing.

Figure 1 is an upper side elevation showing one form of shingle constructed in accordance with the invention.

Figure 2 is a longitudinal sectional view as indicated by line 2—2 of Fig. 1.

Figure 3 is a sectional view showing a number of the shingles laid upon a roof.

Figures 4, 5 and 6 are duplicates of Figs. 1, 2 and 3 with the exception that they illustrate a different form of construction, Fig. 5 being cut on line 5—5 of Fig. 4.

In the form of construction shown in Figs. 1, 2 and 3, the numeral 1 designates a thin rectangular shingle formed of slate or other desired material. Cemented against the underside of the shingle 1, is a piece of flexible roofing 2 of felt or other desired material which is co-extensive in width with the shingle and extends any desired distance above the upper end of the latter, as indicated at 3. A second and relatively small piece of similar flexible roofing material 4 has its upper edge cemented to the outer surface of the backing sheet 2 as indicated at 5 and the lower edge portion of the strip 4 forms a flap 6 overlying the upper end of the shingle 1 and cemented thereto. As indicated at 7, the flap 6 is preferably marked at the points where the attaching nails are to be driven and it will be seen that by driving the nails through said flap, the upper end of the shingle 1 and consequently, said flap forms a cushion which prevents the nail heads from fracturing the slate. Also, attention is directed to the fact that while there is little liability of the points or shanks of the nails fracturing the shingle, if such fracture should occur, it will be sealed by the flap and the backing 2 or 2^a. Attention may here be directed to the fact that pliable adhesive cement is usually employed in securing the flaps and backing sheet to the shingle and such cement will tend to seal the nail holes around the nails. Also, I may state that the flap 6 or 6^a, or any other strip or layer used in its place, acts not only as a nail head cushion, but as a guide in laying the overlapping shingles, and the combined thickness of such shingles and the flap, gives the appearance of thick shingles, even though thin ones may be used.

In the construction disclosed in Figs. 4, 5 and 6, a relatively short backing sheet 2^a is secured to the shingle 1^a and an additional sheet 4^a is cemented at 5^a to the projecting upper end of said sheet 2^a, the lower end of said sheet 4^a overlying and being secured to the shingle to provide a nailing flap 6^a.

Regardless of the exact details used, a shingle is provided which is inexpensive and light, yet is fire-proof and durable and will be advantageous in every way. Excellent results are obtainable from the forms of construction herein disclosed, but it is to be understood that this disclosure is for illustrative purposes only and that within the scope of the invention as claimed, changes in

form, proportions, shape, etc., may be made, and if desired, a plurality of shingles might be provided on a single backing.

I claim:

1. A device of the class described comprising a shingle, and a flexible backing for said shingle extending beyond its upper end and having a flap overlying said upper end.

2. A device of the class described comprising a shingle, a piece of flexible sheet material co-extensive in width with said shingle and extending above the latter, said material being secured to one side of said shingle, and a second piece of sheet material secured to the other side of said shingle and also secured to the first named piece of material, one of said pieces covering he upper end only of the shingle, leaving the remainder of its upper side exposed.

3. A device of the class described comprising a backing, a shingle secured against the lower edge portion of said backing, and a strip-like layer of flexible material secured to the upper side of said shingle along its upper edge portion.

4. A fragile shingle having a nailing portion confined between two layers of flexible material carried by the shingle.

5. A device of the class described comprising a fragile shingle and a layer of flexible material secured to the upper side of said shingle to prevent the heads of nails driven through said layer and shingle from being driven against the latter.

6. A structure as specified in claim 5; said layer being of strip-like form and extending substantially throughout the width of the shingle to form a guide for laying additional overlapping shingles and to combine with the thickness of such shingles in giving a thicker appearance thereto.

7. A thin shingle having means on its upper side for supporting additional overlapping thin shingles, the combined thickness of said means and the overlapping shingles serving to give the appearance of thick shingles.

8. A structure as specified in claim 7; said shingle-supporting means having a straight lower edge to serve as a guide for laying the overlapping shingles.

9. A device of the class described comprising a thin shingle, and a strip-like layer secured to the upper side of said shingle to serve as a guide for laying additional overlapping thin shingles and to support the latter, giving the appearance that thick shingles are used.

10. As a new article of manufacture, a shingle consisting of a section of slate and a section of felt, the felt overlapping the face of the slate at one edge only, the edge of the felt forming a guide for another shingle placed thereon.

11. A composite shingle made of a section of slate and a section of waterproof felt overlapping the face of the shingle at one edge, the felt being of such length as to be engaged by the nails that secure the adjoining shingle in position so that each shingle is secured by two sets of nails.

12. A roof structure made of a series of composite shingles, which consist of a section of slate and a section of waterproof felt, the felt overlapping a portion of the slate and secured thereto, one series of shingles being mounted upon another series, the lower edge of the slate of one series alining with the lower edge of the felt of the series previously laid, and the joints of one series alternating with those of another series.

In testimony whereof I have hereunto affixed my signature.

JAMES H. MUNRO.