Sept. 16, 1930. C. L. KELLER 1,775,937

ROOF

Filed May 10, 1926

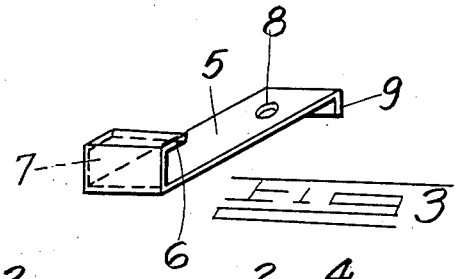


FIG 3

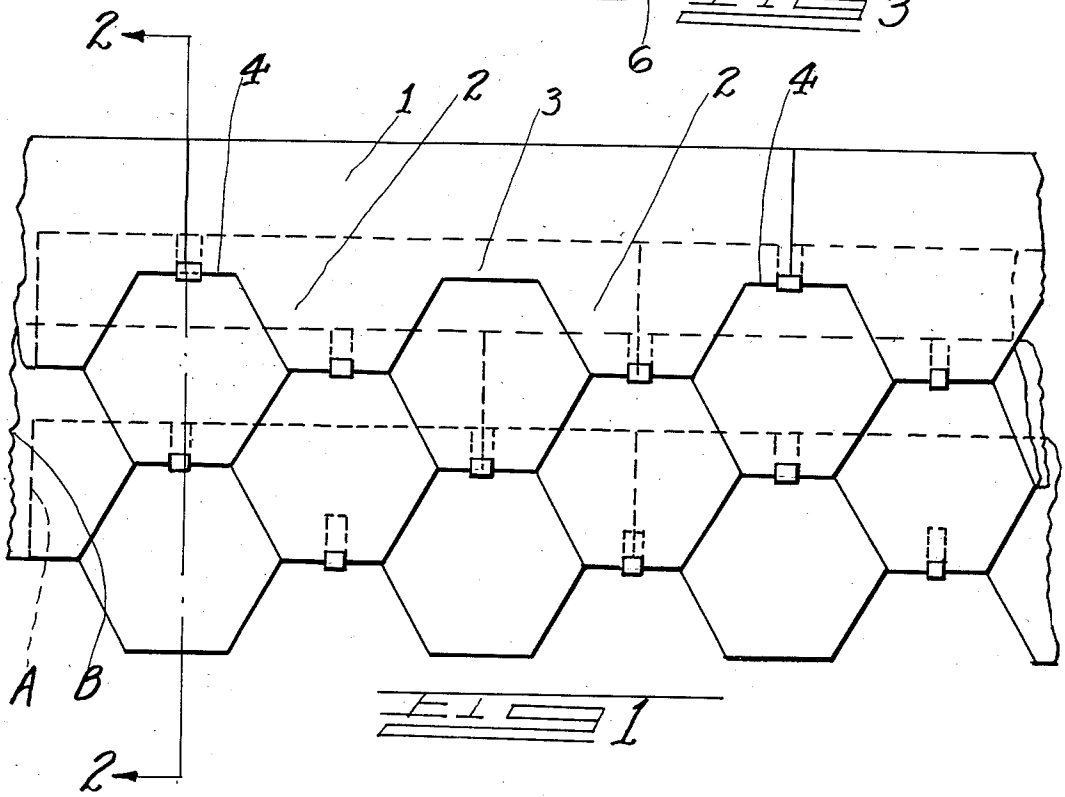


FIG 1

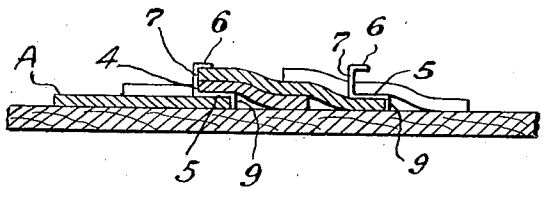


FIG 2

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UNITED STATES PATENT OFFICE

CHARLES L. KELLER, OF CINCINNATI, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE PATENT AND LICENSING CORPORATION, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS

ROOF

Application filed May 10, 1926. Serial No. 107,892.

My invention relates to roofs formed with strip shingles, having interspaced butts, more particularly where the projection forming the butts are widely spaced from each other, as distinguished from having a mere slit between them. In the form illustrated, three sided projections or butts are so laid as to form hexagonal exposures throughout the roof.

In strip shingles of the style noted, it is desirable to hold down the butts by means of something other than nails, and to establish a measuring element, using the hold-down for this purpose whereby the overlap of shingles on each other can be definitely determined by the roofer, and thus the minimum allowable overlap employed by him. This makes for economy in laying, and can be accomplished with the hook element shown and described in my U. S. Letters Patent No. 1,510,497 dated Oct. 7, 1924.

In my said patent, the hooks are used to hold down the projections of individual shingles, and serve as well as spacers for the shingles from each other. In my present invention, involving strip shingles, the hooks serve modified functions, in which the spacing laterally is not followed, but in which a first and third course spacing for back lap is provided, the strips being butted directly against each other and the hooks or securing devices engaging over the meeting line of the end butted shingles.

While applicable to various styles of strip shingles, I will describe my invention with relation to the hexagonal style of roofs, and in the claim will set forth the novelty believed to be inherent in the structure.

In the drawings:

Figure 1 is a plan view of a portion of a roof.

Figure 2 is a section on the line 2—2 of Figure 1.

Figure 3 is a detail perspective of a preferred form of securing device.

I have shown a series of strip shingles having bodies 1, with each two projections 2, 2, of tapering three sided character and with corresponding recesses 3, between the two projections, and half sized recesses 4, 4, at the ends. By placing two of the units end for end, a continuous body is formed with equal projections and spaces or recesses.

In laying, after setting down a starting strip, the first course A, is laid with the units butted lengthwise and with the hooks set with their body portions 5, against the back edge of the units, and their hook portions 6 depending so as to point to the centers of the projections 2. Also for the first course, a set of the hooks will have to be laid intermediate the bodies, as illustrated, but this is only for the first course.

The second course is then laid down, in skip joint method with the recesses 3 so arranged with relation to the hooks that they lie above the hooks, and with their butts 2 centrally engaged by the hooks in the intermediate starting row.

The roof then proceeds by a definite set of stages. The hooks have a wall 7 which extends twice the thickness of the roofing used. They are nailed through holes 8 therein, beginning at the upper edges of each strip shingle opposite the center line of the projection therein.

In each case the hooks, by their projections 9, are engaged over the tops of shingles in one course, the depressions of succeeding course are set under the overhangs (6) of the hooks and overlying the shanks thereof, which is true also of the portions at the meeting line where recesses 4, lie adjacent to each other forming a full sized recess. Also in each case the projections of the next succeeding course are thrust under the overhangs of the hooks.

As so constructed, the distance of each course and the position thereof laterally, is judged by the length of the hooks, which hooks hold down the freely projecting butts or projections 2, overlie the joints 9 between strips, and localize the recesses properly.

The danger point in the roof is at the top edge of each hexagonal exposure so formed, and it will be noted that a portion of the back edge of a shingle equal to the length of the body of a hook, lies above said top edges of the hexagons, that the line of juncture between butted units is covered at

its face by the hook, and that the projection of each shingle is held down against curling or blowing up by the hook.

The size of the hexagonal exposure can accordingly be made quite large without sacrifice of a suitable prevention against blowing up in the wind, and the back lap or space of the body that lies above the top of the hexagon exposures, will be uniformly controlled, at whatever limit of safety is desired. With the hooks covering the joints between units, and the security of an absolute placement, this back lap can be cut down to a minimum without danger of the roofer carelessly leaving too little protection at the weak point of the roof.

It will be noted that the shape of the units illustrated, and their proportions as to size etc., are not intended as limitations as to the invention involved, although the production of an economical roof, with fairly large sized hexagonal, panel-like spaces exposed, is a very desirable factor.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

A roof composed of strip shingles having body portions and alternate projections and recesses between them, said strip laid in skip-joint fashion in rows of endwise butted units, and securing devices formed of strip metal and having body portions of measured length, and terminal hooks of at least twice the depth of the thickness of the roofing material used, said devices placed with their body portions at a position predetermined by the upper edge of the underlying unit, and nailed to the roof deck through the underlying roofing material opposite the projections thereon, and the several units arranged with their recesses lying under the hook ends of the securing devices, and also with their projections lying under the said hook ends, so that each hook end engages over a recess of one strip and a projection of the one next above it, and the position of the body portion of the securing devices determines the back lap of the roof, the projections and recesses being formed as of equal size, and the said units being cut across into strips at points intersecting recesses therein, so that the hook ends lie across the meeting edges of butted units, and said projections and recesses being so shaped as to form hexagonal exposures on the roof, when same is laid in the manner described, with the securing devices laid so as to engage the median points of each projection and recess.

CHARLES L. KELLER.