Nov. 2, 1937. L. SNOW 2,097,845

ROOFING

Filed June 26, 1934

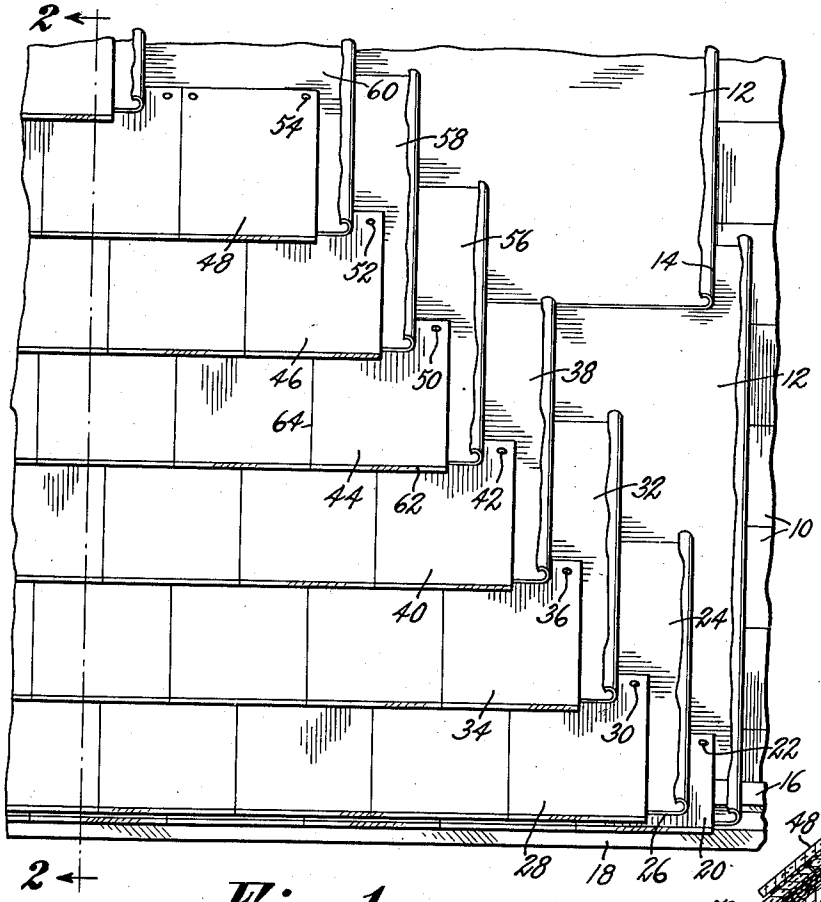


Fig. 1.

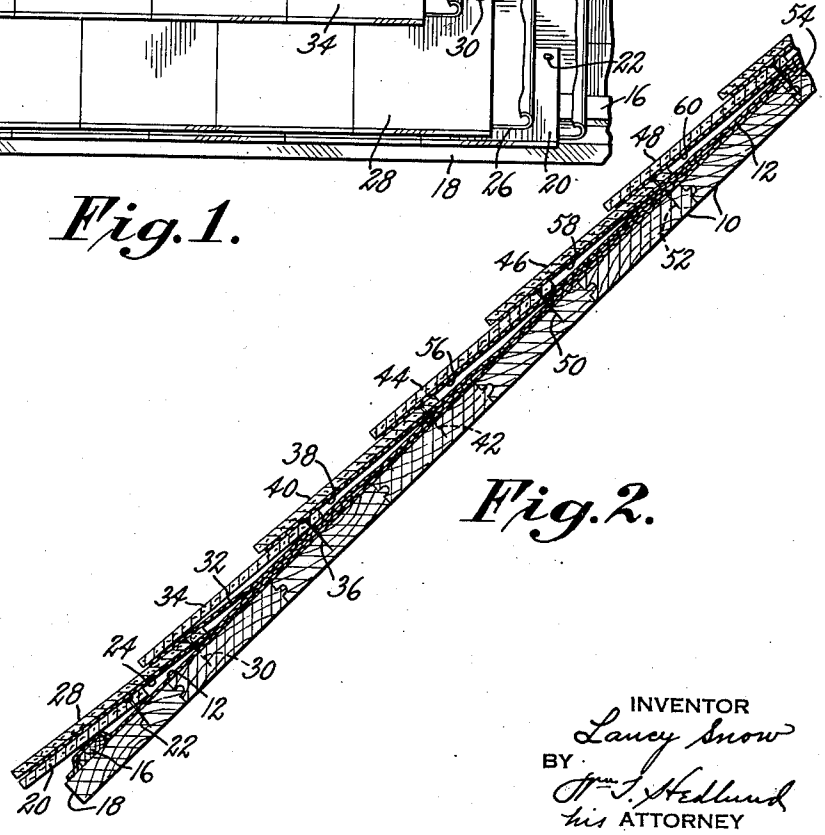


Fig. 2.

INVENTOR
Lancy Snow
BY
Wm. J. Hedlund
his ATTORNEY

Patented Nov. 2, 1937 2,097,845

UNITED STATES PATENT OFFICE

2,097,845

ROOFING

Lancy Snow, Noroton, Conn.

Application June 26, 1934, Serial No. 732,396

2 Claims. (Cl. 108—9)

The present invention relates to roofing and has particular reference to roofing construction for slate roofs.

A principal object of the invention is the provision of improved slate roofing construction utilizing a novel arrangement of slates and roofing felt or the like whereby the amount of slate required to cover a given roof area is greatly reduced as compared with the usual form of slate roof construction, while at the same time providing full protection against leakage of water or air through the roof. A further object is the provision of a roof of the above character that is simple in construction and that may be installed easily and with the minimum amount of labor by those having only the ordinary amount of skill, and which does not involve the cost of prefabrication of roof units in order to secure ease and simplicity of application. A still further object of the invention is the provision of a roof construction of the above character that may be applied readily to any form or contour of roof where ordinary slate roof construction is applicable.

Other and more detailed objects of the invention, together with the advantages to be derived from its use, will become evident from a consideration of the ensuing description of a preferred form of roof construction embodying the invention which is illustrated in the accompanying drawing, in which

Fig. 1 is a plan view of a portion of a roof embodying the invention and illustrating a preferred mode of application, and

Fig. 2 is a section taken on the line 2—2 of Fig. 1.

Referring now to the drawing, 10 indicates the wood roof sheathing which may be of different forms of construction but which is shown as of the usual tongue-and-groove siding. Over the sheathing 10 there is laid the foundation consisting of sheets 12 of suitably impregnated roofing felt or the like. Sheets 12 are advantageously of standard width, for example, 36 inches, and are overlapped as at 14, preferably about 4 inches. As many courses of foundation felt are employed as may be necessary to cover the area to be roofed. In the case of a ridged roof the foundation felt is preferably carried over the ridge on each side to provide a double thickness for a distance of 6 inches or so on each side of the ridge. A cant strip 16 is preferably employed at or adjacent to the eave line 18, over which the bottom sheet of foundation felt is laid.

With the bottom sheet of foundation felt in place, a course of undereave slate 20 is laid, being retained in place by nails 22 passing through suitable holes in the upper corners of the slate. The slate for this course is relatively narrow, preferably being about 7 inches wide. It will be evident from Fig. 1 that the foundation sheets need not all be laid before the laying of slate is commenced, and the bottom sheet of foundation felt may be unrolled from the usual roll and laid progressively ahead of the slate as the latter is nailed in place, the nails for the slate serving to anchor the foundation sheet in place.

Over the course of undereave slate 20 a filler sheet 24 of roofing felt is laid. This sheet is preferably of standard width of 18 inches and the lower edge 26 of the sheet is preferably placed a short distance above the lower edge of the undereave slate 20.

Over the sheet 24 the lower course 28 of roof slate is laid, this course consisting of slate of the width to be used for the whole roof and being materially narrower than the slate used in ordinary slate roof construction. Preferably the slate 28 is approximately 10 inches wide. As will be evident from Fig. 1, the filler sheet 24 and the course of slate 28 may be laid progressively and substantially together, the slate 28 being retained by nails 30 passing through the upper corners of the slate and serving to anchor the sheet 24.

A second filler sheet 32, of the same width as sheet 24, is laid over the upper exposed portion of sheet 24 and the upper portion of the course of slate 28, covering and extending for some distance below the heads of nails 30.

Over the lower portion of the filler sheet 32 the second course of slate 34 is laid, the lower edge of this course preferably extending a short distance below the lower edge of sheet 32 as shown in the drawing. The course of slate 34 is retained by nails 36 passing through the filler sheets 24 and 32 and also through the foundation sheet 12.

The third filler sheet 38 is laid over the upper portion of sheet 32 and the upper portion of the course of slate 34, and the third course of slate 40, retained by nails 42, is laid over sheet 38 in a manner similar to that already described with respect to sheet 32 and slate 34.

Similarly the slate courses 44, 46 and 48, retained by nails 50, 52 and 54, are laid over associated filler sheets 56, 58 and 60, and the construction continued in like manner for as many courses as may be required to cover the desired area.

The several courses of slate are laid in overlapping relation so that a relatively narrow portion of each course is covered by the adjacent course. For example, if slate of 10-inch width is employed the slate is preferably laid so that 6 to 7 inches of each course is exposed in the finished roof. Thus, as will be evident from the drawing, each filler sheet underlies two full courses of slate and partially underlies a third course. Consequently, under the joints between courses, as for example at **62**, there are 4 thicknesses of felt sheeting, at this point consisting of the sheets **56**, **38**, **32** and **12**.

Furthermore, at the joints between adjacent slates of the same course, as at **64**, there is provided the protection afforded by 3 or 4 thicknesses of felt.

As is well known, leakage tends to occur due to the beating of rain upwardly under the lower exposed edges of the different courses of slate, and such leakage is effectively prevented with the construction just described, not only because of the sealing action of the lower edges of the several filler sheets which are in effect clamped between adjacent courses of slate, but also because of the fact that the lower portion of each filler sheet covers and effectively seals the holes in the underlying course of slate through which the nails pass. The brittle characteristic of natural slate is such that chipping and the like inevitably occurs at the nail holes and the nails themselves cannot be depended upon to provide the desired certainty of sealing, which in the present construction is provided by the imperforate filler sheets that mask each nail head and nail hole.

From the foregoing description it will be evident that the details of the mode of laying up the roof may be varied while at the same time retaining the final roof construction characteristic of the invention. The particular mode hereinbefore described is, however, of advantage in that it enables the roof to be laid with the minimum of labor.

Obviously the degree of skill required to lay the roof properly is not great, and in addition to the cost advantage due to the saving in the amount of slate required to roof a given area, the saving in labor as compared with ordinary construction is very substantial, and is in fact comparable to the labor charge incident to the laying of prefabricated roofing units which of necessity involve the additional cost of prefabrication.

The advantages to be derived from the use of the invention are greatest when it is made use of with natural slate, but it is to be understood that the invention is capable of application with other materials such as ceramics or synthetic compositions and as to which the term slate as used herein may be considered as applying.

It will further be understood that the term roofing felt as employed herein is used in a descriptive and not limiting sense.

What I claim is:

1. A roof the major portion of which is covered by slate of a single thickness underlaid by a dual thickness of roll roofing felt, said roll roofing felt being laid in smooth strips with individual slate shingles independently applied thereupon in a manner to form a course, said slate shingles being disposed in slightly overlapping staggered relation to the slate shingles of an adjacent course, and each strip of roll roofing felt having its lower portion substantially co-extensive with the bottom line of the course of slate shingles and its upper portion above the upper line of the next superposed course of slate shingles.

2. Roof construction comprising alternate layers of roll roofing felt and slate, the roll roofing felt being laid in smooth strips and the slate being independently laid in courses of individual pieces upon said strips and the pieces of slate of one course being staggered relative to the pieces of slate of the adjacent course and slightly overlapping the same, the arrangement of roll roofing felt and slate providing a roof which has slate of a single thickness over its major portion underlaid with a double thickness of roll roofing felt, the lower portion of each strip of roll roofing felt being substantially coextensive with the lower extremities of the individual pieces of slate forming the course, and the upper portion of said strip of roll roofing felt extending above the upper extremities of the slate forming the next course above.

LANCY SNOW.