

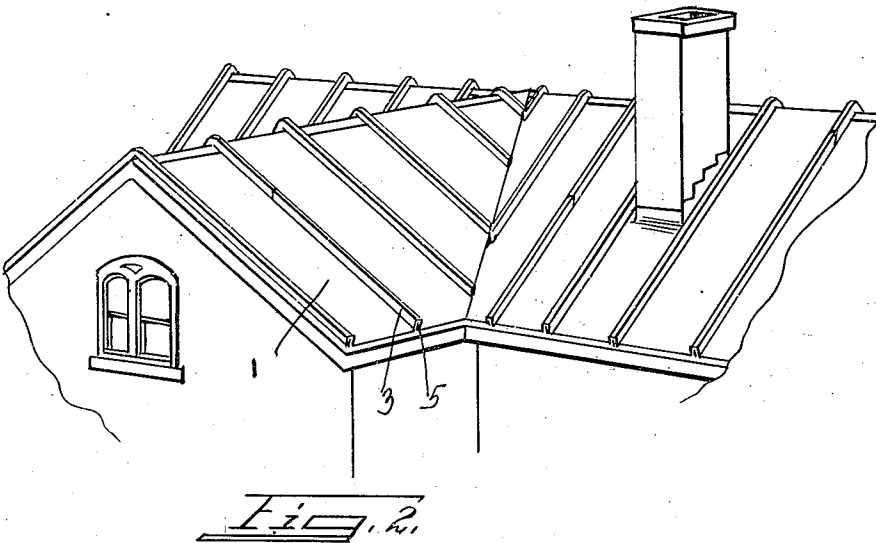
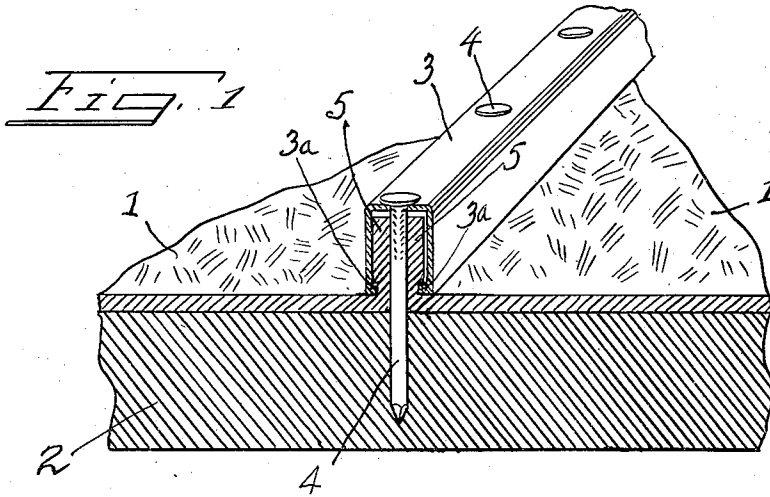
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O. L. HENDERSON

ROOF

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# UNITED STATES PATENT OFFICE.

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## ROOF.

Application filed April 14, 1921. Serial No. 461,228.

*To all whom it may concern:*

Be it known that I, OSBORNE L. HENDERSON, a citizen of the United States, and a resident of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Roofs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to roofs formed of composition roofing, of the type generally known as "roll roofing" and usually formed of felt and asphalt with or without a special coating of crushed stone, brick dust or the like to give a color and finish.

In the use of roofing of this character it has been general practice to lay it in courses horizontally across the roof with the upper strips overlapping the lower ones and the edges of the courses held down by means of cleats.

It is the object of my invention to provide a roof of the "roll roofing" in which the courses are laid crosswise, as distinguished from lengthwise of the roof base, and in which the edges of the rolls are joined together in a simple and effective manner.

Thus my invention involves primarily a novel form of securing the edges of two pieces of material of flexible nature which is specially adapted for use in the crosswise laying of composition roofing.

I accomplish my object by that certain construction and arrangement of parts to be hereinafter more specifically pointed out and claimed.

In the drawings,

Figure 1 is a section taken through a roof built according to my invention.

Figure 2 is a perspective of a roof on a small scale showing the outer appearance presented by my novel roof.

The roofing to be utilized with my invention will be preferably of the type known as "composition roofing" and as "roll roofing," said material ordinarily being made up of felt saturated with asphaltic or bituminous material and shipped in rolls for use as a covering for roofs and walls.

Thus I show strips 1, 1, of such roofing laid on the boards 2 of a roof structure. As heretofore indicated, the roofing is laid crosswise of the roof without overlap, one reason for this being that in view of the

form of joint, if the roofing were laid horizontally there would be a dam formed at each joint preventing the flow of water off thereof. When laid crosswise of a roof and joined together at the edges, roll roofing presents no impediment whatever to a direct flow of water.

As shown, I provide a series of metal strips 3 bent into a U-shape and having formed in the central portion thereof a series of holes for nails 4. The strips also have their lower edges beaded inwardly as at 3<sup>a</sup>.

The strips of roofing are laid in place on the roof abutting each other laterally and the edges turned up for about a half inch in my preferred practice, as at 5, 5.

The U-shaped strips are of a width just ample to receive two flaps or folds 5 plus a roofing nail and when the strips have been mounted and the edges brought into abutment, the strips are set over the edges so as to enclose them and the roofing nails then driven home into the boards of the roof. In case a strip runs short and a lapping of the folds is necessary, three of the folds may be engaged by the strips 3. If a nail be forced into the three folds, however, it will probably pierce the middle fold.

The result of this is to bring the sides of the pieces 3 down firmly against the roofing and the nails will find a passage between the roofing edges, so that they do not perforate the roofing at all.

Any water which seeps past the tight abutment of the edges of the strips 3 with the plane surface of the roofing will not be able to pass up around the turned up portions, so that the joint will be a perfectly water tight bond, extending cross-wise of the roof.

The metal of the strips is not so stiff that it will not give slightly to expansion and when one strip is not long enough to reach throughout a full length joint, the other pieces may be readily overlapped slightly and the joint sealed with pitch. The beads 3<sup>a</sup> press against and partially into the fabric without tearing it and thus hold it tightly in place.

I do not find it necessary with this form of joint to seal with pitch, which makes unsightly humps in roofing of this type as it is generally laid, and when complete I preferably coat the strips 3 with asphalt

paint or some such medium and sprinkle onto them the same sort of coating as is used with the roofing itself.

The important features of my invention are the provision of a tight joint without overlapping, and without driving any nails through the roofing. In some weather I find it advisable to bend up the abutting edges of the strips prior to bringing them on the job, because in cold weather a careless operator might crack the body of the material in forming the bend.

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

1. A roof surface, comprising lengths of flexible roofing laid crosswise of the roof, with the edges of the roofing bent upwardly and arranged in substantial abutment, and joining strips of channel form set over the upstanding edges, said strips being wide enough to readily receive two abutting edges of roofing, and nails driven down through the channel pieces between the abutting edges of the roofing to force the upturned edges of the roofing material into close engagement with the sides of the clamp pieces and at the same time to secure the same to the roof.
2. A roof surface, comprising lengths of flexible roofing laid crosswise of the roof, with the edges of the roofing bent upwardly and arranged in substantial abutment, and joining strips of U-shaped form set over the upstanding edges, said strips being of a width substantially equal to two thicknesses of roofing and nails driven down

through the center of the strips and between the abutting edges of the roofing to force the upturned edges of the roofing material into close engagement with the sides of the clamp pieces and at the same time to secure the same to the roof.

3. A roof surface, comprising lengths of flexible roofing laid crosswise of the roof, with the edges of the roofing bent upwardly and arranged in substantial abutment, and joining strips of channel form set over the upstanding edges, said strips being wide enough to readily receive two abutting edges of roofing, and nails driven down through the channel pieces, between the abutting edges of the roofing to force the upturned edges of the roofing material into close engagement with the sides of the clamp pieces and at the same time to secure the same to the roof, said channel strips being of resilient metal.

4. A roof surface, comprising lengths of flexible roofing laid crosswise of the roof, with the edges of the roofing bent upwardly and arranged in substantial abutment, and joining strips of channel form set over the upstanding edges, said strips being wide enough to readily receive two abutting edges of roofing, and nails driven down through the channel pieces, between the abutting edges of the roofing to bring the edges of the strips tightly down against the plane surface thereof, said edges of the strips being beaded over along their lower edge with beads turned in so as to engage the roofing.

OSBORNE L. HENDERSON.