(No Model.)

J. H. DELLMON.

METAL ROOFING.

No. 302,113. Patented July 15, 1884.

Fig. 1.

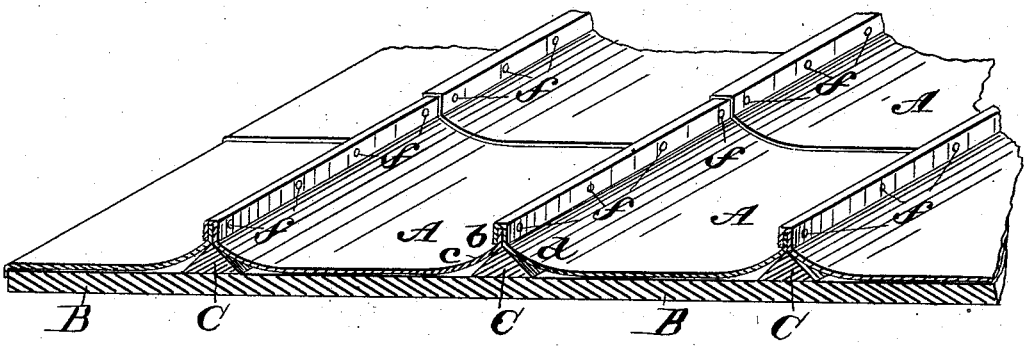


Fig. 2.

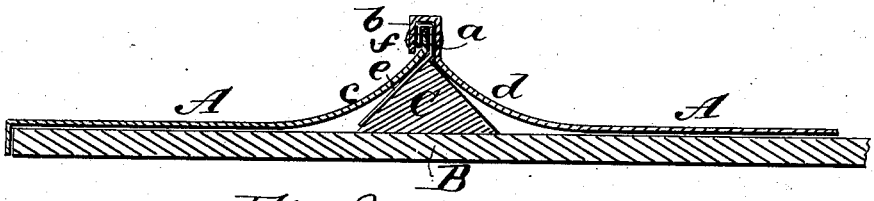


Fig. 3.

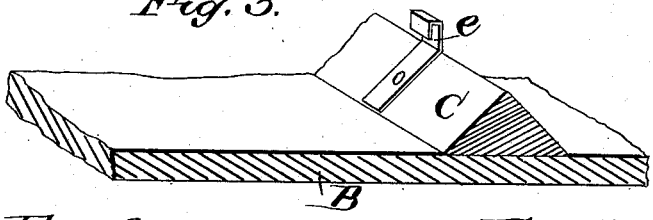


Fig. 4.

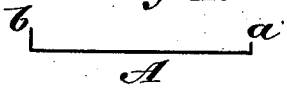
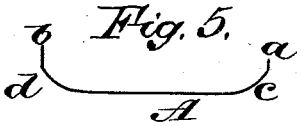


Fig. 5.



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JOHN H. DELLMON, OF PINE BLUFF, ARKANSAS.

METAL ROOFING.

SPECIFICATION forming part of Letters Patent No. 302,113, dated July 15, 1884.

Application filed February 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. DELLMON, of Pine Bluff, in the county of Jefferson and State of Arkansas, have invented certain new and useful Improvements in Metal Roofing, of which the following is a full, clear, and exact description.

This invention consists in a sheet-metal roofing of novel construction, and in which the strips or sheets of metal are turned and bent on their opposite side edges in such manner, and said strips are so arranged and fitted to each other and secured and supported that every facility is afforded for contraction and expansion without breaking the metal, leakage at the seams is avoided, and the roofing will lie close to the sheeting on which it rests, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a perspective view of a roof in part embodying my invention. Fig. 2 is a section of the same, upon a larger scale, taken transversely to the pitch; Fig. 3, a perspective view of the sheeting or substructure in part, with a roofing-support and cleat thereon; and Figs. 4 and 5, diagrams in illustration of the manner in which the metal strips are turned and bent.

In the construction of my improved tin or sheet-metal roofing, I first put up the metal in rolls, in strips as long as it will be found convenient to handle. The same are then transferred to the roof to be covered and, after unrolling the strips, cut into the required lengths. I then apply a pair of tongs to each sheet A, as cut from the strip, and turn up one of its side edges, as at *a*, Fig. 4, to the height or depth of about half an inch, and similarly turn the opposite side edge, *b*, to the height or depth of about one and one-fourth of an inch. I next take another pair of tongs, and, applying the same to the sides of the sheet beyond its turned-up edges *a b*, bend or round the strip or sheet in the same direction, as at *c d*, Fig. 5. The sheets or cut strips A are then put into their proper places on the wooden sheeting, or other substructure, B, of the roof, and pieces of wood C, of triangular shape in their transverse section, of a size to correspond with the required pitch of the roof, (see Figs. 1, 2, and 3,) are arranged under the smaller turned-up edge of the sheets and nailed or otherwise securely fastened to their places. I then apply any number of cleats *e*, at suitable distances apart, (see Figs. 2 and 3,) to the smaller turned-up edges *a* of the sheets and fasten the same onto the one side of the angular supports C. The opposite edge of the first strip or series of strips may be suitably turned and bent to secure them to the wall of the house, thus making the starting-point. The one starting-strip or series of strips having been secured and the cleats *e* on the supports C applied to their smaller upturned edges *a*, I then similarly prepare another strip or series of sheets A, shaped as described, and placing its or their larger turned-up edge *b* up against the smaller turned-up edge *a* of the previous strip, draw the two edges tightly together with tongs, after which said larger edge should be turned half over the smaller one and paint or iron cement be applied to said edges. I then wholly close the edges of the adjacent strips by turning the larger edge *b* of the one fully down over the smaller edge *a* of the other and secure with rivets *f*, as shown in Figs. 1 and 2. Any number of strips or series of strips or sheets in rows are similarly united together to complete the roof, the shape and bends of the strips, as described, providing increased room for contraction and expansion. Thus when contracting, the metal simply rises, and when expanding presses down tighter to the roof, the bent or rounded portions of the strips giving the yield, so that there is no chance of breaking the metal. It will lie down closer to the substructure or sheeting than any or most other metal sheathing or roofing, and its shape is such that the water-fall will be always down the middle of the strip, thus doing away with all liability of leakage at the seams, which may be made perfectly tight by painting the roof after it has been completed, as shown and described.

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

1. In sheet-metal roofing, the combination

of the angular wooden pieces C, applied as shown, with the strips or sheets A A, having their opposite side edges turned up unequally, as at *a b*, and curved or bent, as at *c d*, and arranged and fitted together, so that the larger turned marginal portion of the one strip is closed down over the smaller turned marginal portion of the adjacent strip and the two secured together, substantially as specified.

2. The combination of the angular wooden supports or pieces C, applied to the roof, as described, and the sheet-metal sheathing or roofing composed of strips or sheets A A, unequally turned up and curved or bent on their opposite side margins for fitting together and engagement with each other, as described, and the cleats *e*, essentially as shown and described.

JOHN H. DELLMON.

Witnesses:
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