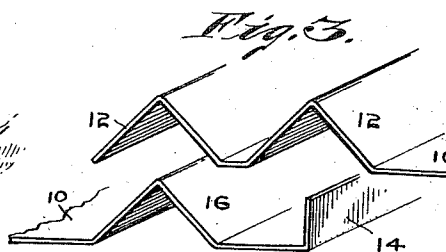
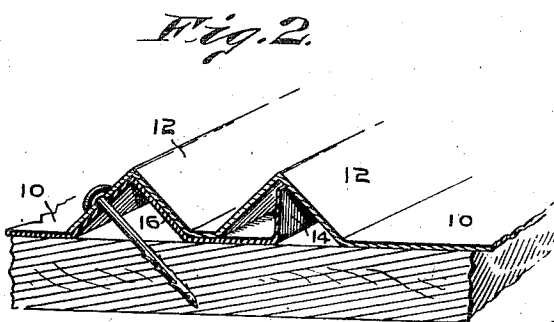
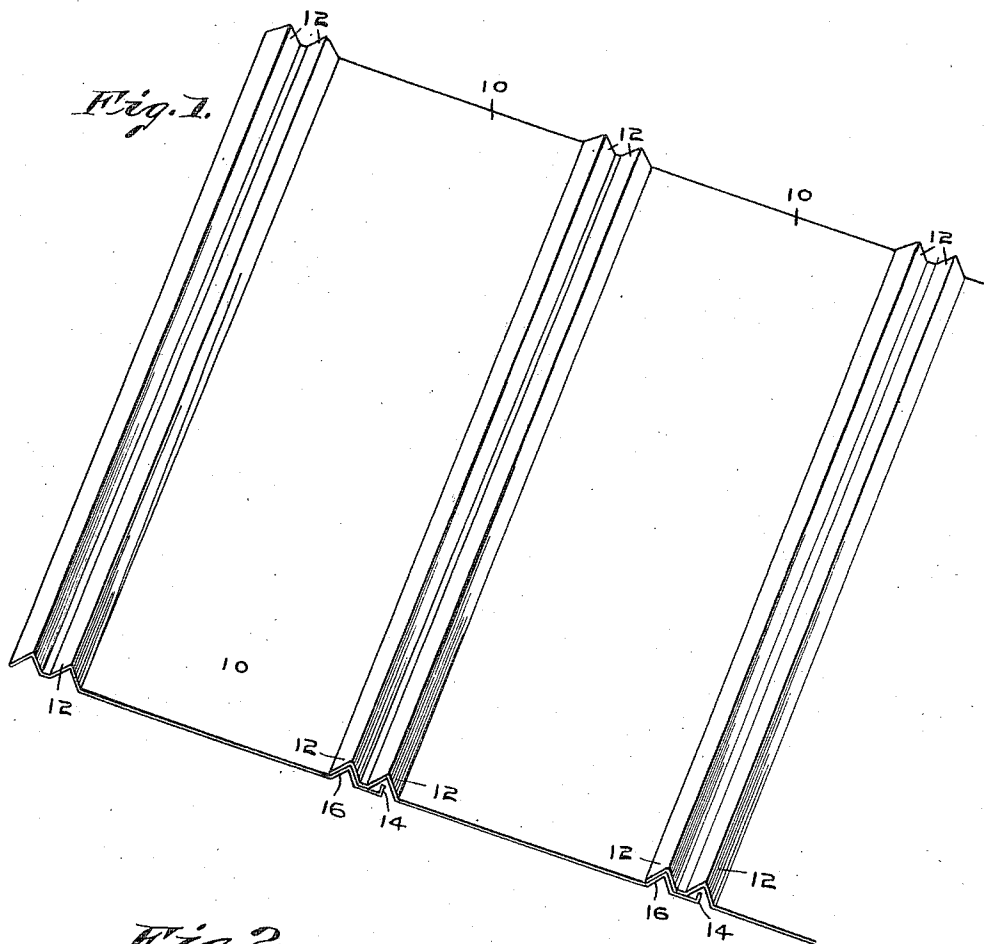


K. ROTH.
SHEET METAL ROOFING.
APPLICATION FILED NOV. 7, 1910.

1,018,782.

Patented Feb. 27, 1912.



WITNESSES:

L. B. Moerner.
Wm. Hurte.

INVENTOR

Karl Roth
Mintum & Moerner
attorneys
By J. H. Moerner

UNITED STATES PATENT OFFICE.

KARL ROTH, OF TERRE HAUTE, INDIANA.

SHEET-METAL ROOFING.

1,018,782.

Specification of Letters Patent.

Patented Feb. 27, 1912.

application filed November 7, 1910. Serial No. 591,072.

To all whom it may concern:

Be it known that I, KARL ROTH, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Sheet-Metal Roofing, of which the following is a specification.

This invention relates to sheet metal roofing.

I am aware that there are any number of different kinds of roofing on the market which are provided with peculiar and interlocking seams for holding the sheets together, but I have found in the manufacture of sheet metal roofing a growing desire among a certain class of people to cover their own buildings, and as those people are rarely provided with the necessary tools for properly fastening these peculiarly shaped hooked seams their efforts result in leaky roofs. This condition has, to a certain extent, discouraged the use of sheet metal roofing on farm buildings for the reason that roofs of this character laid by skilled workmen are too expensive for the class of people for which the present invention is intended.

The object of this invention is to provide a simple and easy means for joining the side edges of sheet metal roofing to prevent water from seeping through the overlapping edges thereof.

I accomplish the object of the invention by certain means illustrated in the accompanying drawings, forming a part hereof, in which—

Figure 1 is a view in perspective of two sheets of metal roofing laid side by side with the adjacent edges of the sheets overlapping. Fig. 2 is a fragmentary detail perspective view of the overlapping edges of two sheets of metal roofing, showing the formation of the ribs for excluding the water. Fig. 3 is a view similar to Fig. 2 except that the two sheets are separated.

In the drawings, 10 represents the body of the sheet metal material used for roofing purposes. Each sheet of metal is provided on one of its longitudinal edges with two vertically disposed V-shaped ribs 12, and the opposite edge of each sheet is bent upwardly to form the wall 14, and in addition thereto each sheet is provided with a single V-shaped rib 16 which extends parallel to and in close relation to said wall 14. When two sheets of roofing are joined the

edge containing the two ribs 12 is laid to sufficiently overlap the edge of the adjacent sheet so as to permit the rib 12 nearest the edge to fit down over the similarly shaped rib 16 in the sheet below, while the second rib 12 will straddle the wall 14 on the sheet below. It will be noted that the operation of laying the sheets is extremely simple, and the ribs and wall as formed will absolutely prevent water from passing between the overlapped edges of the sheets.

It oftentimes happens that water will seep through many of the interlocked joints in sheet metal roofing, this being common particularly where the overlapped surfaces of the sheets follow the same common plane and curve, on account of capillary attraction. For instance, it will be noted in Fig. 2 of the drawings that the V-shaped rib 12 in the upper sheet tightly hugs the rib 16 in the sheet underneath throughout the several angles on which said ribs are formed. In such a case, if these were the only ribs or, for that matter, if each sheet were provided with several ribs of the same character, it is quite likely that water would work its way between the overlapped edges of the sheets. To remove all danger of water passing between the overlapped edges on account of capillary attraction I provide, as before stated, each sheet with an additional rib 12 which merely forms a passageway for the wall 14 formed on the sheet underneath. The wall 14 is formed so that its height will be somewhat less than the internal height of the rib above so that an uninterrupted air space is formed the entire length and on both sides of the terminal edge of the sheet containing the wall 14. Hence, if, on account of capillary attraction, water should climb over the rib 16 in the underneath sheet it would be caught and carried away in the channel existing between the foot of the rib and the foot of the wall 14, and the said wall would prevent progress of the water transversely of the sheet.

With the use of this invention no special care is exercised in laying the sheets or in placing the nails for holding the sheets in place on the sheathing. The ribs are made wide V-shaped in order to provide suitable blank sides for the convenient driving of nails therethrough, without necessity of previously forming nail-holes in the sheets before being laid. This permits the nails

to be driven in any location along the ribs and obviates the difficulty of bringing the holes of the plates in register, which would occur were the holes previously formed in the roof plates. The nails are all provided with lead washers to close the openings around the bodies of the nails, and the latter are driven through the rib 12 and rib 16, as shown in Fig. 2 of the drawings.

10 Having thus fully described my said invention, what I desire to secure by Letters Patent, is—

15 A sheet metal roof consisting of a plurality of metal sheets with overlapping edges, each sheet provided along one side edge with two vertically disposed ribs of the wide inverted V shape and the opposite edge of the sheet turned upwardly at a right angle to form a wall and a vertically

disposed rib formed in said sheet adjacent to and parallel with said wall, the said wall being formed less in height than the ribs, so that when the adjacent metal sheet is laid over said wall an uninterrupted air space will remain on both sides and over the top of said wall and the nails driven through the ribs adjacent to the one covering said wall, to secure the said roofing sheets.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this 26th day of October, A. D. one thousand nine hundred and ten.

KARL ROTH. [L. s.]

Witnesses:

F. W. WOERNER,
L. B. WOERNER.