

Metal-Roofing.

Patented Sept. 23, 1879.

Fig. 1.

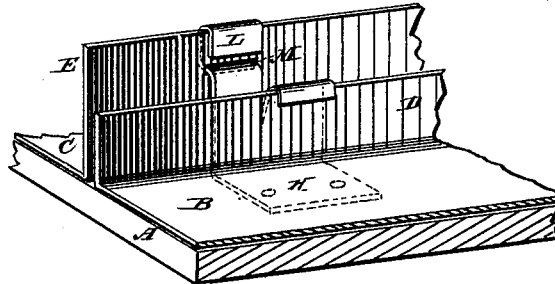


Fig. 2.

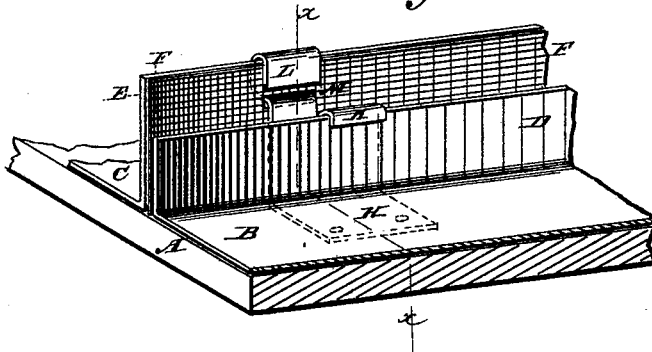


Fig. 3

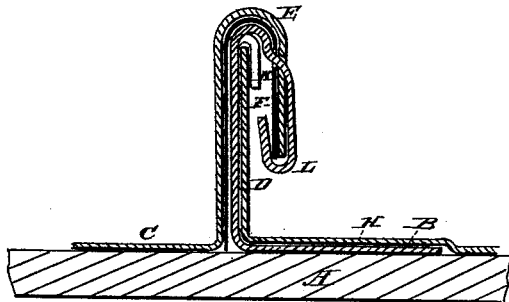


Fig. 4.

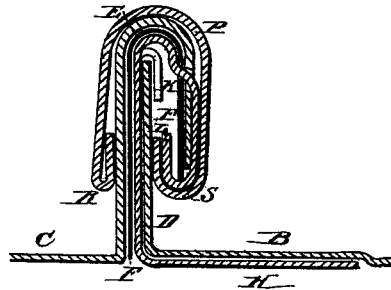
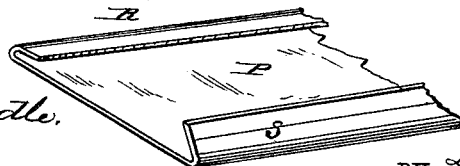


Fig. 5.



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IMPROVEMENT IN METAL ROOFING.

Specification forming part of Letters Patent No. **219,954**, dated September 23, 1879; application filed June 23, 1879.

To all whom it may concern:

Be it known that we, ROBERT JONES and LEWIS S. BONBRACK, of Waynesburg, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Metal Roofing, of which the following is a specification.

This invention relates to that class of metal roofs in which the edges of the metal plates are turned up to form flanges, and are then bent over each other so as to form a cap and produce a close and water-tight joint.

It consists of an anchor provided with a short and a long prong, so arranged that the short prong is bent over the flange of one of the roof-plates, and the long prong is passed through and passed over the flange of the adjoining plate. The flange of the latter plate is then bent down and over the flange of the first plate, so as to form the cap of the roll-joint.

In the accompanying drawings, Figure 1 is a vertical cross-section and perspective view of the roll-joint before the flanges are bent over each other. Fig. 2 is a vertical cross-section and perspective view of the roll-joint in the same position, and having a piece of felt or like material inserted between the adjoining flanges. Fig. 3 is a vertical cross-section of the joint, showing one flange bent down over the other. Fig. 4 shows the same vertical section with an additional cap or hood. Fig. 5 shows the additional cap or hood.

Similar letters of reference indicate corresponding parts.

A is the sheeting, upon which the metal plates B and C, provided with flanges D and E, having different heights, are attached. A cleat or anchor, H, provided with a long prong, L, and a short prong, K, is attached to the sheeting, so that it will be between the two flanges D and E. The smaller prong, K, is bent over the edge of the lower flange, D, thus securing the plate B, and the larger prong, L, is first passed through the slot M in the higher flange, E, and is then bent over the top edge of this flange, as is shown in Fig. 1. The higher flange, E, is then bent down over the edge of the lower flange, D, as is shown in Fig. 3, and forms the cap of the roll-joint.

In case the joint is very much exposed and liable to become leaky, an additional cap, P, can be attached to the same. The edges of

the cap P are folded, as is shown in Fig. 5, the fold S being much larger than R. If the cap they to be applied the fold S is passed over the upper edge of the flange E when the same is in the position shown in Fig. 1, and the cap is then bent down over the edge of the flange D with the flange E, as shown in Fig. 4. The fold S is turned down on the side of the flange E. The edge of the cap is folded so that no rough edges are presented. This cap P covers all the slots M through which the long prongs of the anchors pass, and produces a perfectly close and tight joint. This cap may be applied throughout the whole length of the joint, or only at the anchors.

A packing-strip, F, of felt, tarred paper, or some other suitable material, may be applied between the two flanges, if desired. It is of the same height as the larger flange, E, is placed alongside of it, pierced, and secured to the flange by the prong L, as is shown in Fig. 2, and with this flange is bent down over the flange D, as is shown in Figs. 3 and 4. The additional cap is attached in the same manner as before. The whole joint may be laid down flat, if desired.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a roll-joint of a metal roof, the anchor H, having a short prong, K, bent over the flange of one plate, and the long prong, L, passing through and over the edge of the flange of the other plate, as and for the purpose set forth.

2. The combination of the prong L and flange E, the former passing through the latter and turned around it, as set forth, to form a cap and economize the metal.

3. In a roll-joint of metal roofing, a packing, F, secured to flange E by the prong L, passed through and over the upper edge of both, as shown and described.

4. The combination, with anchor H, having short prong K and long prong L, of the short flange D, long flange E, and intermediate packing F, as and for the purpose specified.

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