(No Model.)

J. C. BAYER.

TILE ROOFING.

No. 600,606. Patented Mar. 15, 1898.

Fig. 1.

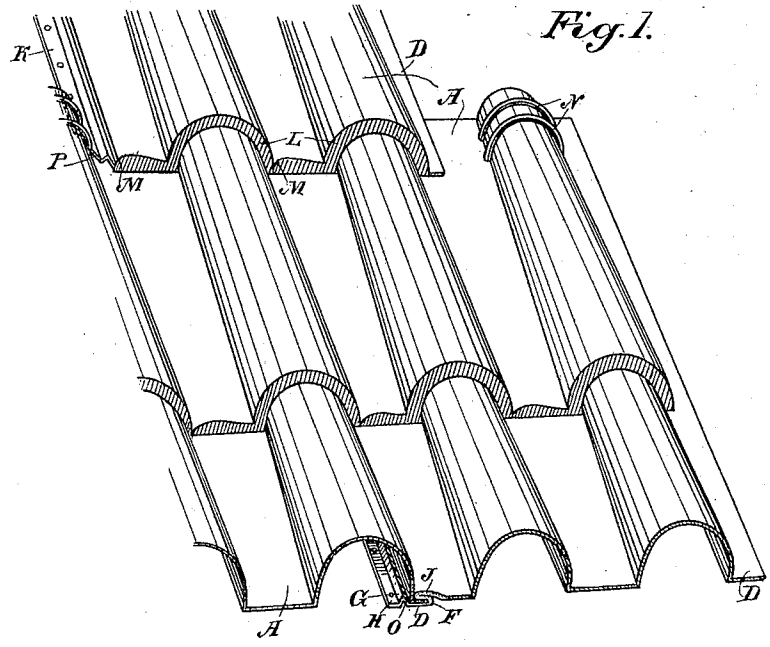
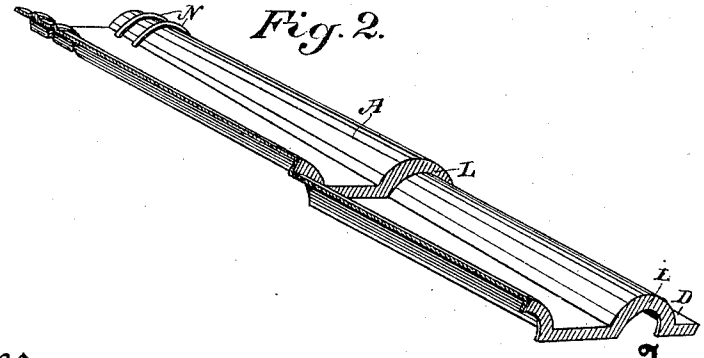


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH C. BAYER, OF PORTLAND, OREGON.

TILE ROOFING.

SPECIFICATION forming part of Letters Patent No. 600,606, dated March 15, 1898.

Application filed September 28, 1897. Serial No. 653,301. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. BAYER, a citizen of the United States, residing at Portland, county of Multnomah, State of Oregon, have invented an Improvement in Tile Roofing; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of roofing technically known as "metal Spanish tile;" and it consists in a novel construction of the tiles with devices for interlocking two or more sheets of such tiles both vertically and laterally, and which devices are hereinafter fully described.

The objects of my invention are to provide a thoroughly waterproof roof-covering and to secure the same to the roof in such a manner as to allow for condensation, contraction, and expansion.

In the accompanying drawings, Figure 1 represents a portion of my tile roofing in its place. Fig. 2 is a view of a single roofing-plate, partially shown in section.

As my tiles are made of metal, they require certain devices for interlocking the sheets of tile together, and while these joints are applicable to and intended to be used in the construction of sheets showing but a single tile they are particularly applicable to and useful where two or more tiles are stamped or formed vertically and longitudinally or in clusters of any convenient number of tiles made from a single piece of metal.

In this invention the single pieces of metal are cast, rolled, or stamped into raised ornamental form similar to one or more terra-cotta tiles and having the general appearance of such tiles when laid.

A is a roofing-plate composed of a single piece of metal curved or arched, as shown, and having one edge turned outwardly to form an engaging tongue D. The opposite edge of the tile is folded inwardly under the upper flat part, and then outwardly back upon itself, as at F, to form a channel sufficiently open to receive the edge D of the next adjacent plate or tile. At G it is bent into an inverted-V shape or equivalent corrugation, which lies interior to the arch and near the edge D of the next adjacent tile when the latter is laid. From G the plate extends a short distance outwardly to form a nailing strip or flange H, by which it is secured to the roof-boards.

In laying the tiles upon a roof a tile is first laid and fastened to the roof-boards through the flange H. The edge D of the next tile is inserted in the groove or lock J F, thereby holding the tongue D of that side of the tile down in place and forming a storm-proof lock. When two or more tiles are made together, representing several tiles in one piece of metal, the lock F and tongue D are formed the entire length of all the tiles unbrokenly, as shown at K K, Fig. 1.

L L, Fig. 1, represents the butt of the second tile, the metal being pressed outwardly to represent the butt of the tile, but pressed in one piece of metal, so that there is no joint or lap at this point. On the side on which the lock-joint is the edge of this butt is depressed, as shown at M, so that that portion of the tile on which the tongue D is formed lies close up to the lock F. It also serves to in a measure conceal the joint between two tiles when laid.

N N are two ribs pressed across the top of each series of tiles for the purpose of stiffening the sheets at that point and to prevent leakage.

The space O between the water edge G and the interior of the arch of the next tile forms a channel to carry off any condensed moisture which may be deposited therein or any water which might get in under the tongue D.

The lower edge of the water edge G and flange H is notched, as shown at P, so that it will not interfere with the close laying of the adjoining tile.

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

1. An improved tile roof-plate composed of a single sheet of metal forming a plurality of tiles, having an essentially straight and continuous lock-seam and engaging tongue on opposite edges and each extending the full length of the whole number of tiles formed in the sheet.

2. A roofing-tile consisting of a plate of metal formed to represent a plurality of tiles laid in courses with the butts formed by depressions and elevations made across the sheet, an essentially straight continuous lock-

seam formed by a tongue projecting from one edge of said sheet, and a channel to receive the tongue of the next adjacent sheet formed by bending the sheet upon itself as shown and described.

3. In a sheet-metal roofing, the combination of an essentially straight continuous lock on one side of the sheet formed by bending a portion of such sheet upon itself to form a channel in the fold as shown with a tongue projecting from the adjoining sheet to interlock with said channel and means for preventing the flow of water over the edge of the sheet and for securing the sheet to the roof.

4. The combination in a sheet-metal roofing of an essentially straight continuous lock on one side of the sheet formed by bending a portion of such sheet upon itself to form a channel to receive the interlocking edge of the next adjacent sheet, a protecting water edge formed on the same side of the sheet, and outwardly from said lock, and a nailing-strip extending outwardly from said water edge with a flange or tongue extending from the adjoining sheet and adapted to fit into said lock.

5. In a sheet-metal roofing, the combination of an essentially straight continuous lock on one side of the sheet formed by folding a suitable portion of such sheet first inwardly upon itself, and then downwardly and outwardly to form a channel, a protecting water edge formed on the same side of the sheet in the form of an inverted **V**, and outwardly from said lock, a nailing-strip extendiug outwardly from said water edge, parallel ribs extending across the upper portion of said sheet, and an upward step extending across said sheet at about its center, a tongue extending from the adjoining sheet and adapted to fit into said lock.

In witness whereof I have hereunto set my hand.

JOSEPH C. BAYER.

Witnesses:
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