

(No Model.)

T. B. ATTERBURY.
ROOFING TILE OR PLATE.

No. 263,835.

Patented Sept. 5, 1882.

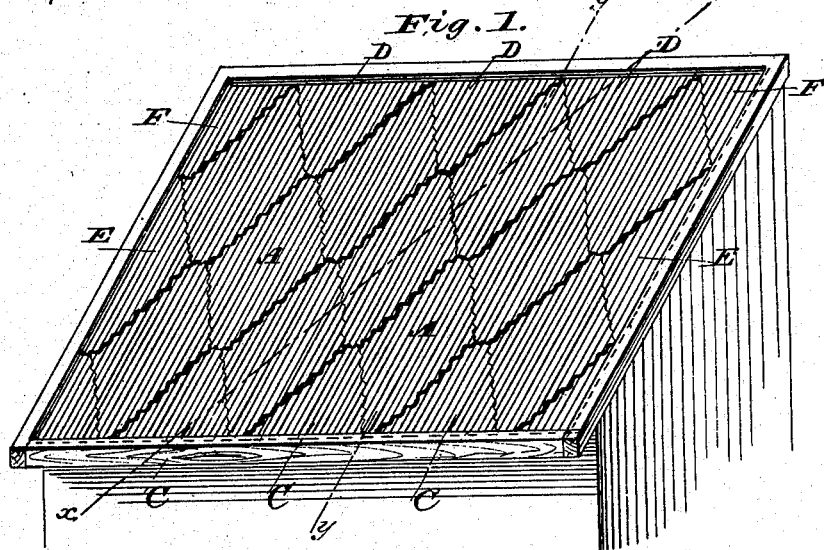


Fig. 7.



Fig. 8.

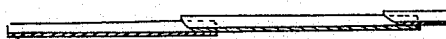


Fig. 2.

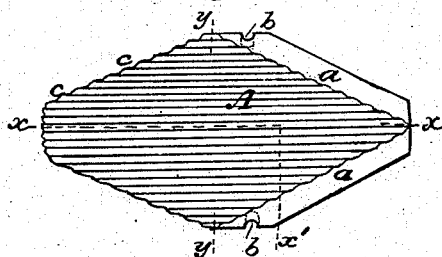


Fig. 4.

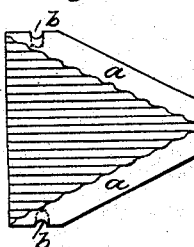


Fig. 3.

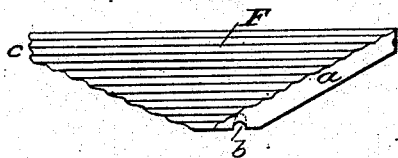


Fig. 5.

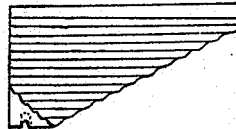
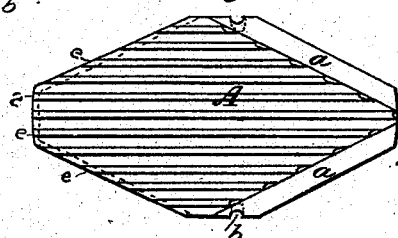


Fig. 6.



WITNESSES

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THOMAS B. ATTERBURY, OF PITTSBURG, PENNSYLVANIA.

ROOFING TILE OR PLATE.

SPECIFICATION forming part of Letters Patent No. 263,835, dated September 5, 1882.

Application filed June 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. ATTERBURY, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Roofing Tiles or Plates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to tiles or plates for roofing purposes; and it consists in certain details of construction hereinafter more fully set forth, and pointed out in the claims.

Figure 1 is a view in perspective of a roof composed of my improved tile or plate. Fig. 2 is a top view of a tile. Fig. 3 is one-half of the tile or plate on line *x x* of Fig. 2. Fig. 4 is a portion of the tile cut on line *y y* of Fig. 1. Fig. 5 is a portion of the tile on the line *x x'* of Fig. 2. Fig. 6 is a top view of a modification in which the main or exposed surface of the tile is ribbed instead of being corrugated. Figs. 7 and 8 are sectional or edge views of the tiles as laid, taken on the lines *x'' x''* and *y'' y''*, respectively, of Fig. 1.

Referring to the drawings, A represents a full tile, plate, or shingle designed for covering the roof or inclosing the sides of a house or other building. The tile or plate A is by preference made of the form shown, and is provided with plain edges *a*, which constitute the lap portions of the tile, and also forms a flat bearing-surface for the upper portion of the tile. The plain surface *a* may be of any desired width consistent with economy and utility, and is provided with niches or slots *b b* for the reception of nails, by which the tiles or plates are secured to the laths or sheathing-boards. The niches or slots may be made large, as indicated by the dotted lines, and the nails inserted at about the middle or center thereof, so as to provide ample room for expansion and contraction caused by thermal changes. The main portion of the tile or plate A is provided with corrugations *c*, which ex-

tend in parallel lines from the plain surfaces *a* to the lower edge of the tile or plate, and which rise in relief above the plane of the plain surfaces *a*, so that the water will be carried directly away from the joints, or, rather, the corrugations of one tile or plate will match with the corrugations of the tile next below, and thus form continuous grooves or corrugations from the ridge to the eaves of the roof. These corrugations are not merely ribs or grooves formed on the upper face only of the tile, the under face being plain, (which is not new,) but are corrugations of the tile-plate itself, and appearing upon both upper and under sides of the tile. By this means it is that in lapping one upon one below the corrugations fit each other and the grooves are made continuous from ridge to eaves. This a very desirable and important consideration or feature of my invention, for the reason that provision is made for the expansion and contraction of each individual tile, and at the same time the entire surface presents grooves for the ready conveyance of water from the roof.

In Fig. 4 the upper half of the tile or plate A as cut on the line *y y* of Fig. 2 is shown. This portion of the tile or plate is designed to be used as the first course on the roof at the eaves, as indicated at C in Fig. 1, while the lower half of the tile A is designed to be used as the finishing course at the ridge, and is indicated in Fig. 1 at D.

In Fig. 3 I have shown a half of the tile A as cut on the line *x x* of Fig. 2. This portion or form of tile is adapted to fill in between the main or whole tiles along the edges or sides of the roof, as indicated by E in Fig. 1, and for finishing or filling in the upper corners of the roof I sever the tile or plate, as indicated by the lines *x x'* of Fig. 2, said sections being shown in position at F, Fig. 1.

I purpose to cut and stamp my improved tile into the form desired from sheet metal, which can then be galvanized, painted, or decorated in any suitable or desirable manner; but it is obvious that they can also be made from paper, paper-pulp properly waterproofed, or from glass, or from any tenacious material which can be made thin and still withstand the necessary wear and tear without departing

from the spirit of my invention; but for all practical purposes it will be preferable to make them of sheet metal, as above indicated, so that an ordinary workman need only to supply himself with a pair of metal shears, hammer, and nails to enable him to make a complete roof, as soldering and bending folds at the joints are dispensed with.

The corrugations may be made slightly larger at their lower ends than they are at the top, so that they will fit down snugly on the upper end of the corrugations in the next tile below; and, if desirable, the portion of the tile which overlaps the corrugations of the next adjacent tile may be coated with an elastic cement, or an elastic strip of rubber or felt interposed to more securely seal the joint and prevent the entrance of wind and water.

In Fig. 6 I have shown a modification. The only difference between this modified form and the tile or plate already described is that, instead of corrugations, ribs *c* are formed in parallel lines on the greater portion of the surface of the tile, and when properly laid in position the spaces between the ribs form the gutters for conveying or directing the water. This form of tile is by preference made from cement, clay, asphaltic or bituminous mastics, glass, or material which can be readily molded, and at the same time be tenacious and strong enough to admit of the lap portion *a* being made very thin, so that it will not form too much of an offset or prevent the adjacent tile from lying firmly and snugly on the sheathing-boards or laths. The portion *a* may be made tapering from the upper ends of the ribs to the edge, and thus prevent an offset. This form of tile may also be made of sheet metal, and in case sheet metal is used in this form of tile I do not make the ribs to extend quite to the lower edge of the tile, or farther than the point indicated by dotted lines in Fig. 6, so as to form a flat bearing-surface to rest on the lap or portion *a*, and thus prevent the entrance of wind and water, as would be the case were the ribs extended to the lower edge of the tile.

I am aware that corrugated plates of both

cast and sheet metal have been used in the construction of roofs, and such I do not broadly claim. I am also aware that clay or terra-cotta tiles have been made with a plain upper border, with V-shaped grooves running parallel to said border on the upper side, and with V-shaped grooves along the lower edge and on the under side of said tiles, to prevent the water from beating under the edge of the tile and over the plain upper edge. I am also aware that such tiles have been made with elevated and depressed portions on their upper surfaces; but such tiles have been made much thicker than mine, and as a consequence the roofing-laths have to be beveled and prepared to receive the tiles, while my tile can be laid on the ordinary sheathing-boards or other plain surface without any special preparation for the reception of the tiles.

What I claim is—

1. A tile or plate for roofing purposes, of substantially the form herein shown (and described, provided with a plain lap-border, *a*, slots *b*, and corrugated or ribbed portion, which rises in relief above the plane of the plain surface *a*, whereby the tile or plate is provided with a uniform bearing-surface and the expansion and contraction of each individual tile or plate is provided for.

2. As a new article of manufacture, a sheet-metal tile or plate of the character herein described, the upper edges of which have a plain space which forms the lap and bearing-surface of the next adjacent tile, the remaining portion of the tile being corrugated or ribbed in parallel lines from the plain upper portion to the lower edge thereof, which rises in relief above the plane of the plain surface *a*, whereby the tile is adapted to be laid flat on the plain surface of the sheathing-boards and interlocking flanges or lugs dispensed with, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS B. ATTERBURY.

Witnesses:

J. S. ATTERBURY,
D. S. SALISBURY.