G. A. TAYLOR.
Roofing-Tile.

No. 211,944. Patented Feb. 4, 1879.

Fig: 1.

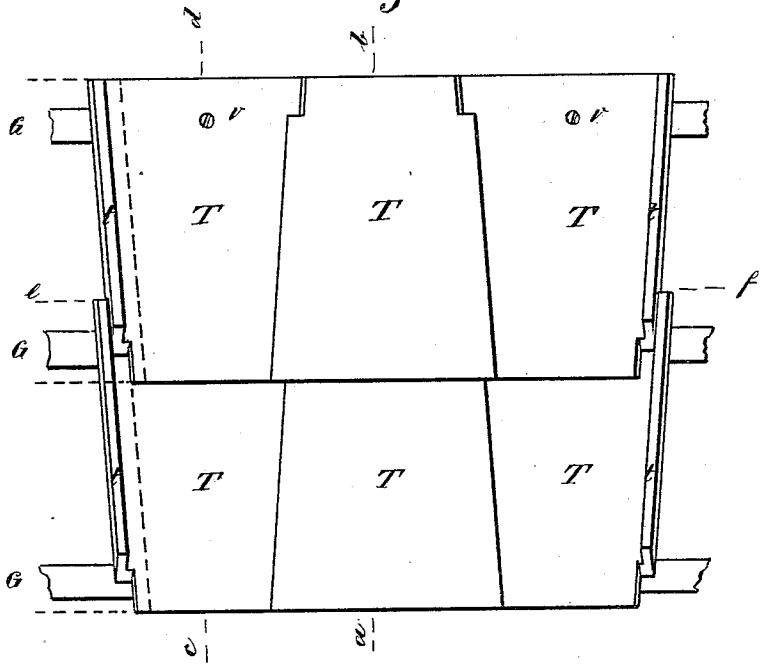


Fig: 2.

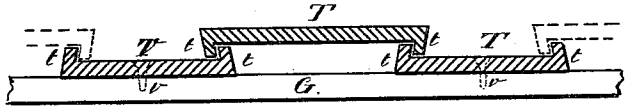


Fig: 3.

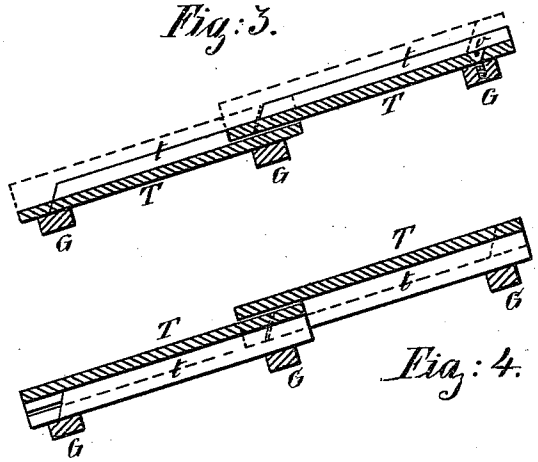


Fig: 4.

Witnesses.
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GEORGE A. TAYLOR, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN ROOFING-TILES.

Specification forming part of Letters Patent No. **211,944**, dated February 4, 1879; application filed November 1, 1878.

To all whom it may concern:

Be it known that I, GEORGE A. TAYLOR, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Roofing-Tile, which improvement is fully described in the following specification, reference being had to the accompanying drawings.

The nature of my invention relates to roofing-tiles having marginal flanges, by which the same are interlocked with each other in such a manner that they will be held firmly together and will form a water-tight surface.

My invention consists mainly in the peculiar construction of the roofing-tile; and, further, in the roof made by laying my peculiar tiles and securing them, as fully hereinafter explained.

In the drawings, Figure 1 represents a plan of a portion of a roof composed of my improved tile. Fig. 2 represents a transverse section of the same on line *e f* in Fig. 1; Fig. 3, a longitudinal section on line *c d* in Fig. 1; and Fig. 4, a similar section on line *a b*.

T is the body of the tile, consisting of a flat plate of terra-cotta or other suitable material, oblong in form and narrower at one end than at the other. On one side this tile represents a perfectly plain surface, while at the opposite side it is provided with longitudinal marginal flanges *t*, projecting about the thickness of the body of the tile. These flanges *t* commence at and are flush with the broad end of the tile, and extend to a point within a short distance from the narrow end of the same, at which point they are cut slanting to an angle of about forty-five degrees. The distance between said flanges *t* at the broad end of the tile is a little wider than the measurement across the exterior edges of said flanges *t* at the narrow end of the tile, and said flanges are placed on an acute angle with the face of the tile-body, for the purpose of forming dovetailed joints with the flanges of the adjacent tiles when placed on the roof. One-half the number of tiles required have holes for screws or nails *v* in the center of the body near their broad edges, which, when the tiles are laid, will be covered by the overlapping narrow ends of the row of tiles next above. These tiles are secured in rows upon horizontal stringers G, framed into or otherwise fastened upon the rafters of the building-roof, at proper distances apart, by screws or nails *r*, by commencing at the eaves of the roof with placing every other tile for the lowest row with its narrow end downward and its flanges up, at such a distance apart that when the intermediate tiles are placed to cover the interstices with their broad ends elevated and their flanges downward, said flanges will cover and embrace one flange of each adjacent tile, and will form a dovetailed joint therewith. The inverted or flange-up tiles are now laid and secured in rows equal distances apart up the slope to the hip of the roof in such a manner that the narrow end of an upper tile will overlap the body of the broad end of the tile next below it, and that the flanges of said upper tile will lie between the flanges of the lower one, so as to form a dovetailed joint therewith, after which the intermediate rows of tiles, with their flanges downward, are placed to cover the interstices, by commencing again at the eaves of the roof, and by sliding each tile downward over the dovetail formed by the flanges of the two horizontally-adjacent tiles, whereby each of the slanted flange ends of an inverted tile will form a butt-joint with one of the slanted flange ends of the contiguous covering-tiles of the next lower row, and whereby each covering-tile will overlap and interlock with the contiguous covering-tile below.

As will be seen, by this device of dovetailed flanges to the tiles, the same are connected in such a manner in either direction that they cannot be raised off by the storm blowing from under. Every joint is covered to such a perfection that leakage of rain-water is utterly impossible from a roof composed of the above-described tile.

This tile being very plain in its construction, it is easy to mold, and can be made very light, since the marginal flanges will stiffen the same and make it strong and durable.

I am aware that it is old to make a roofing-tile of tapering form, and having side flanges terminating in sloped or beveled ends, and that tapering tiles have had the side flanges constructed to project at an acute angle to the body of the tile, and therefore I do not claim either of these features broadly, but only my peculiar tile and the roof made from it.

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

1. The flat and thin roofing-tile T, constructed of tapering form, and having side flanges *t*, projecting at an acute angle to the face of the tile and extending from the broad end to near the narrow end of the tile, said flanges terminating in sloped or beveled ends, such tile having no other projections, and adapted to be laid with other like tiles in the manner set forth and shown.

2. A roof composed of the tapering tiles T, having side flanges, without other projections, placed at an acute angle and terminating in beveled ends, the small ends of the tiles projecting beyond the side flanges, such tiles being laid in up and down rows, with flanges upward, and secured by a screw or nail driven through the body of each tile at its broad end, the narrow end of one tile above being slid into the broad end of the adjoining tile below till the flanges meet, and so as to cover the securing nail or screw, the spaces between these rows of tiles being covered by rows of reversed tiles, the small ends of which reversed tiles extend up between the flanges of the tiles composing the first rows and are covered by the next tiles above, all constructed and arranged substantially as described and shown.

GEORGE A. TAYLOR.

Witnesses:
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