(No Model.)

E. ALDRICH.

TILE.

No. 345,942. Patented July 20, 1886.

Fig. 1.

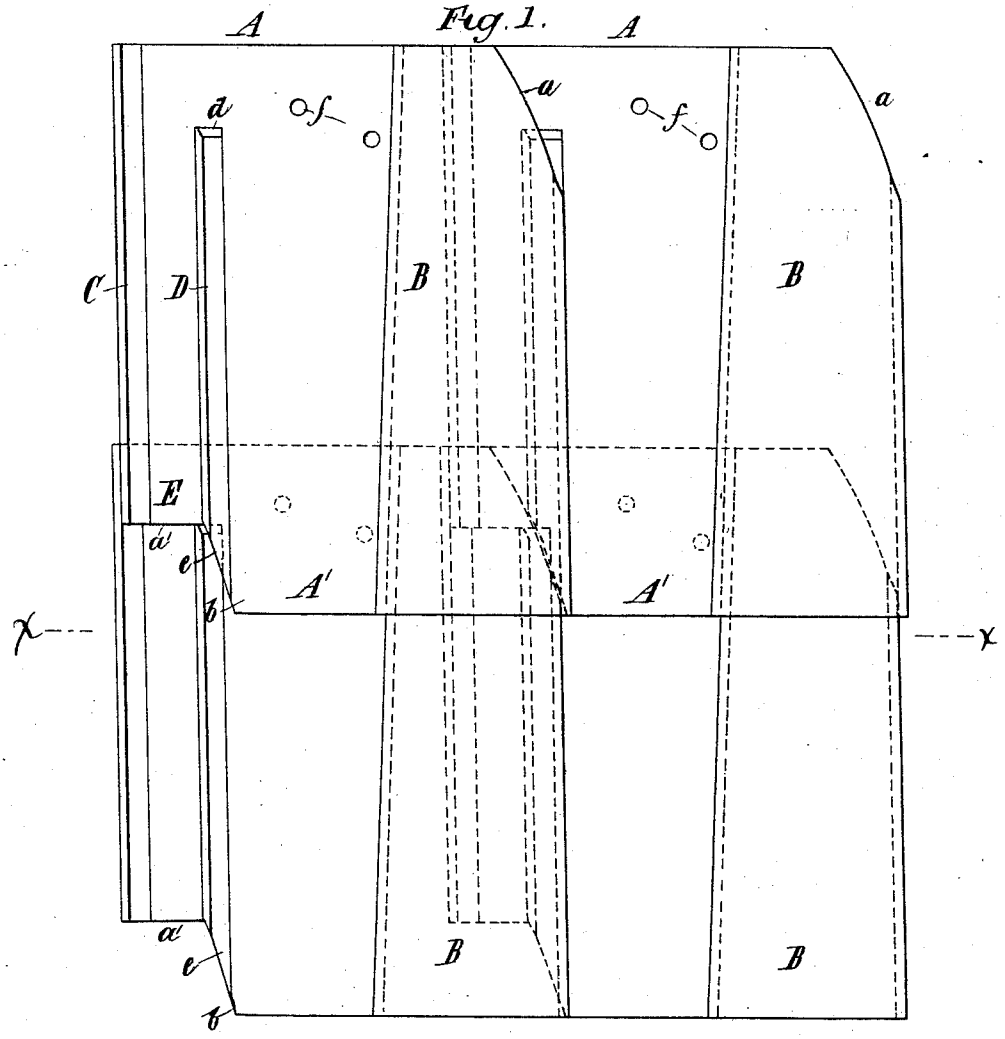


Fig. 2.

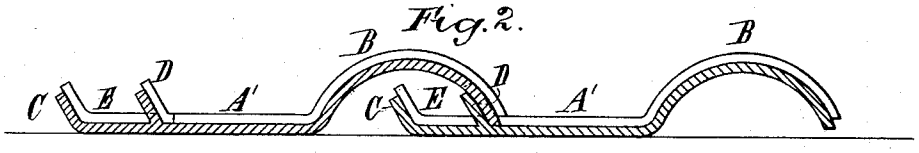
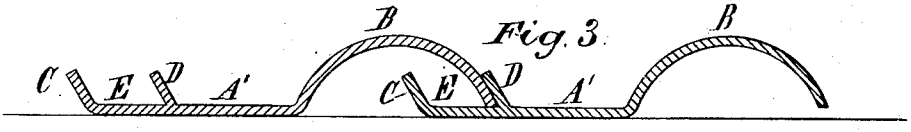


Fig. 3.



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UNITED STATES PATENT OFFICE.

ELBERT ALDRICH, OF NEW YORK, N. Y.

TILE.

SPECIFICATION forming part of Letters Patent No. 345,942, dated July 20, 1886.

Application filed January 23, 1886. Serial No. 189,466. (No model.)

To all whom it may concern:

Be it known that I, ELBERT ALDRICH, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Tiles, of which the following is a specification.

My improvement relates to tiles used for roofing and similar purposes, and which are usually made of pottery.

I will describe in detail tiles embodying my improvement, and then point out the novel features in the claims.

Figure 1 is a face view of several tiles embodying my improvement arranged as they would be upon a roof. Fig. 2 is a transverse section thereof, taken on the dotted line *x x*, Fig. 1. Fig. 3 is a transverse section of tiles laid together in a manner different from that shown in Figs. 1 and 2.

Similar letters of reference designate corresponding parts in all the figures.

Each of the tiles is composed, essentially, of a main flat portion, A, a curved or rib-like portion, B, a rim or flange, C, formed upon the edge thereof opposite the rib-like portion B, and another rim or flange, D, formed upon the main portion A inward of the rim or flange C. The longitudinal edge of the rib-like portion B is chamfered off near one end, as at *a*, to a point approximating the crown of said rib-like portion. The main portion A and the rim or flange E are cut away for a distance, as at *a'*, near one end thereof. The main portion A is so cut away between the flanges C D. It is then chamfered off, as at *b*, to the adjacent end of said main portion. The rim or flange D is considerably shorter near one end, as at *d*, than the rim or flange C. At its other end said rim or flange D is preferably chamfered off, as at *e*, at an angle corresponding to the angle of the chamfered portion *b* of the main portion A.

The tiles may be secured to a roof or other support by means of nails or screws passing through holes *f* in the main portion A, or in any other suitable manner.

In placing the tiles together for use they will, preferably, extend in such manner that the rib-like portions B thereof will form continuous ribs from the ridge-pole to the eaves of a roof. The main portion A between the rib-like portions B and rims or flanges D will form continuous gutters or troughs A', down which water may flow, and the main portions A between the flanges C D will form other continuous gutters or troughs, E, down which such water may flow as may get into them. To accomplish this one of the ends of each of the tiles commencing at the eaves of a roof is caused to overlap the end of the tile next below it for a distance, and also the tile next adjacent to it upon one side successively until the ridge-pole is reached.

I have clearly indicated in the drawings the manner in which the tiles so overlap. As shown in Figs. 1 and 2, the rib-like portions B of each tile extend over and inclose the rims or flanges C D upon the tile to which it is next adjacent upon one side and over a part of the rib-like portion B upon the tile next below it. The main portion A overlaps the main portion A of the tile next below it, and that portion of said main portion between the flanges C D which is cut away, as at *a'*, abuts against the end of the rim or flange next below it. The chamfered portion *e* of the rim or flange D and the chamfered portion *b* of the main portion A together fit the chamfered edge *a* upon the rim-like portion B of the tile next below it. It will be seen that by this arrangement continuous gutters or troughs are formed, as described. It will also be seen that the surface of the portions A of the tiles, and also of the rib-like portions B, are continuous and uninterrupted.

Tiles thus constructed and laid effectually prevent the entrance of water between them, and the roof below the tiles is therefore kept perfectly dry. This result is chiefly due to the use of the troughs or gutters E between the rims or flanges C D. When rain is driven by a storm beneath the edges of the rim-like portions B, it passes up over the flanges D and into the troughs or gutters E, down which it flows freely off the roof. If it were not for the flange-rim D the rain would be blown over the top of the rim or flange C, and so upon the roof beneath the tiles. Of course the flange D might be arranged outside the rib-like portion B, as shown more clearly in Fig. 4, whereby the same useful result would be attained.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a roof, of tiles, each

comprising a portion, A, extending longitudinally of the tile and having a continuous uninterrupted upper surface, rims or flanges C D, and a rib-like portion, B, having a continuous uninterrupted upper surface, the ends of the tiles overlapping and forming continuous gutters A′ and E, substantially as specified.

2. The combination, with a roof, of tiles, each comprising a portion, A, extending longitudinally of the tile and having a continuous uninterrupted upper surface, rims or flanges C D, and a rib-like portion, B, having a continuous uninterrupted upper surface, the ends of the tiles overlapping and forming continuous gutters A′ E, the gutters E and rims or flanges C D being wholly beneath the rib-like portions B, substantially as specified.

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