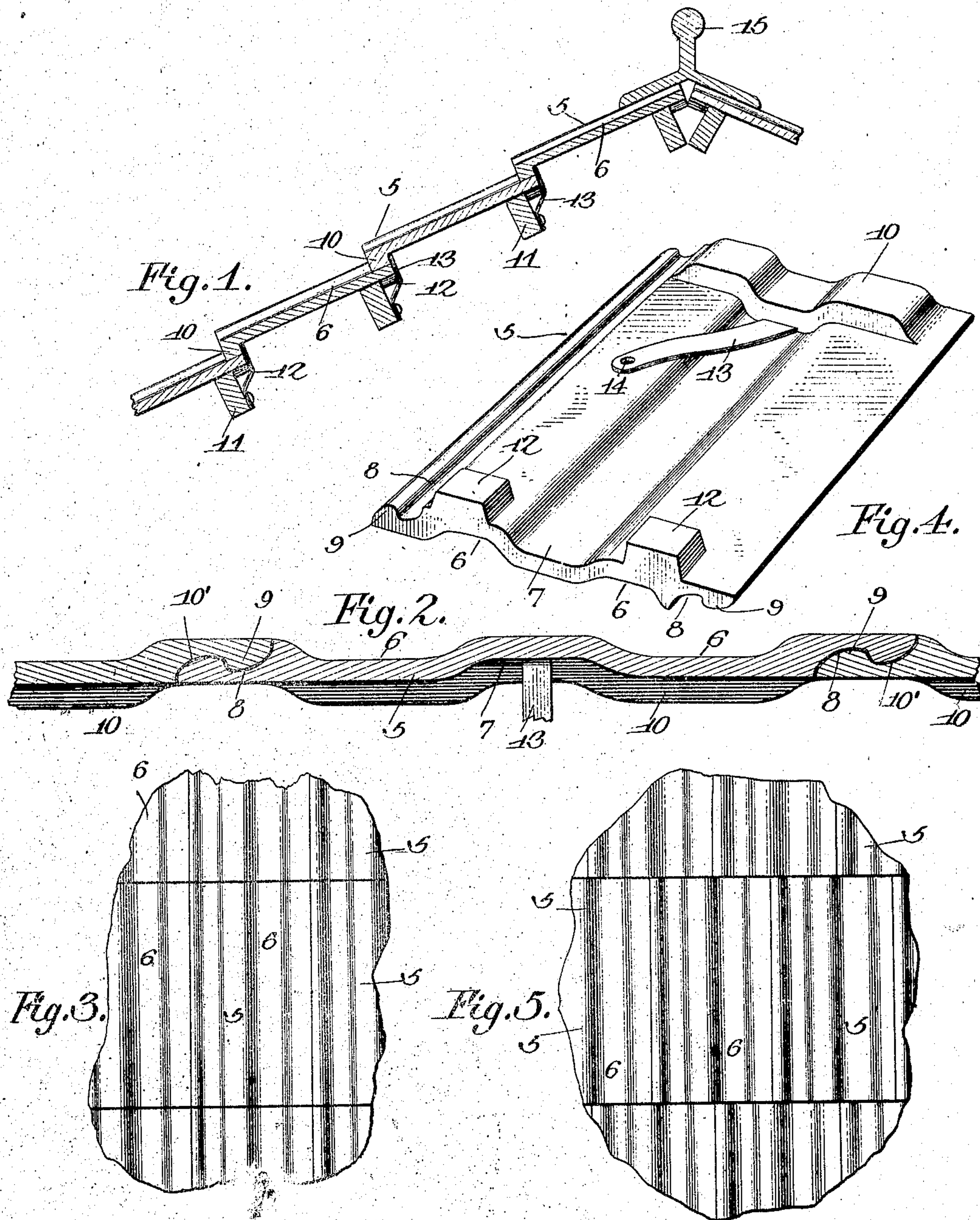


No. 814,970.

PATENTED MAR. 13, 1906.

F. M. LEUSCH.
ARTIFICIAL STONE ROOFING TILE OR SHINGLE.
APPLICATION FILED DEC. 14, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK M. LEUSCH, OF TRAER, IOWA.

ARTIFICIAL-STONE ROOFING TILE OR SHINGLE.

No. 814,970.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed December 14, 1904. Serial No. 236,865.

To all whom it may concern:

Be it known that I, FREDERICK M. LEUSCH, a citizen of the United States, residing at Traer, in the county of Tama and State of Iowa, have invented a new and useful Artificial-Stone Roofing Tile or Shingle, of which the following is a specification.

This invention relates to an improved artificial-stone roofing tile or shingle, and has for its object to provide a simple, inexpensive, and durable tile of this character designed to take the place of the ordinary wooden shingle now in general use.

A further object of the invention is to provide a roofing-tile having oppositely-disposed longitudinal locking-lips adapted to engage the corresponding locking-lips of adjacent tiles when several of the latter are laid into a roof.

A further object is to provide a tile the general contour and construction of which is such as to form a plurality of water passages or channels extending the entire length of the roof, said tiles being laid with the forward end of one tile overlapping the rear end of the succeeding tile, thereby preventing the water from accumulating at the juncture of said tiles and working its way beneath the latter.

A still further object of the invention is to provide means for retaining the tiles in position on the spars or battens of the roof preparatory to nailing or otherwise permanently securing said tiles.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal sectional view of a portion of a roof, showing a series of tiles constructed in accordance with my invention in position thereon. Fig. 2 is a transverse sectional view. Fig. 3 is a top plan view. Fig. 4 is an enlarged detail perspective view of one of the tiles detached and looking at the bottom or under side of the same. Fig. 5 is a top plan view of

a portion of a roof, showing the tiles laid to break joint.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The roofing-tile 5, which may be formed of cement, glass, terra-cotta, or other suitable material, is preferably formed of a mixture of cement, sand, and ground cinders molded in the shape shown and subsequently covered with a coating of liquid cement to give the same an exterior finish and render the tile impervious to moisture.

The tile is preferably corrugated in cross-section, as shown, thereby defining a plurality of longitudinal water passages or channels 6 on its upper face and a single longitudinal channel 7 on its lower face. The side edges of the tile are provided with oppositely-disposed longitudinal grooves or recesses 8, adapted to receive the correspondingly-shaped locking-lips 9 of adjacent tiles when several of said tiles are laid side by side to form a roof, as clearly shown in Fig. 2 of the drawings. Projecting from the bottom of the tile, at the forward end thereof, is a transversely-disposed depending lug 10, the latter being corrugated in cross-section to conform to the surface of the tile, so that when said tiles are in position the depending lug on the forward end of one tile will conform to and engage the rear end of the succeeding tile. The overlapping ends of the tiles in each row are preferably secured together by a layer of cement or other adhesive material preferably interposed between the depending lug of one tile and the forward end of the next, thereby preventing the water from accumulating at the juncture of said tiles and working its way beneath the latter. The longitudinal edges of adjacent tiles are also secured together by a layer of cement 10', interposed between the locking-lip of one tile and the longitudinal groove of the next.

As a means for retaining the tiles in position on the spars or battens 11 preparatory to permanently securing the former to the roof I form the forward end of each tile with a pair of spaced depending lugs 12, adapted to engage the spars or battens, as shown. Embedded in the body of the tile or otherwise secured thereto is a metallic retaining strip or bar 13, adapted to be nailed or otherwise fastened to the battens 11. The bar or strip 13 is provided with one or more open-

ings 14 for the reception of the fastening means, and in laying the tiles the bar on one tile preferably engages the rear end of the succeeding tile, as clearly shown in Fig. 1 of the drawings; thereby locking the overlapping ends of the tiles to each other and also to the spars or battens 11 and effectually preventing accidental displacement of the same.

A ridge-piece or gable-saddle 15 engages the tiles at the apex of the roof, and this ridge-piece is also preferably formed of the plastic material before mentioned.

The tiles and ridge-piece may be tinted or otherwise colored in order to give an ornamental appearance to the roof, either by adding a pigment to the plastic material before molding the same or by adding said pigment to the liquid-cement coating.

In Fig. 3 the tiles are arranged with their longitudinal edges disposed in alinement with each other, while in Fig. 5 said tiles are arranged to break joints, as shown.

A shingle formed in the manner described is light, serviceable, and easily applied and will effectively resist the action of the elements for an indefinite period.

Having thus described the invention, what is claimed is—

A tile having a corrugated body portion provided with oppositely-disposed longitudinal locking-lips adapted to engage the locking-lips of adjacent tiles, said body portion having its upper or exposed face unobstructed and its lower face provided at one end of the tile with a plurality of spaced lugs for engagement with the transverse batten of a roof, the opposite end of the lower face of the tile being formed with a transversely-disposed depending lug conforming to the shape of the tile and adapted to engage the unobstructed upper face of a succeeding tile, and a retaining-strap secured to the tile at said transverse lug and adapted to engage the rear end of said succeeding tile and the adjacent transverse batten of the roof.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED. M. LEUSCH.

Witnesses:

E. E. YELINEK,
CURTIS H. THOMAS.