J. SEILER AND E. REIFF.

ROOFING TILE.

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1,416,583.

Patented May 16, 1922.

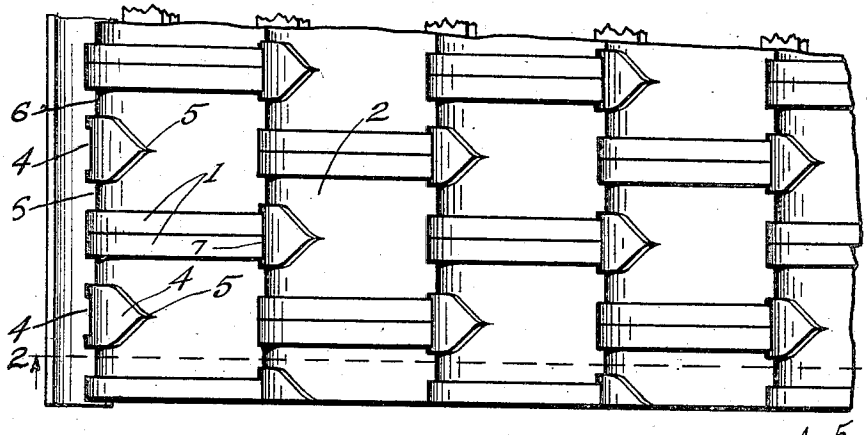


Fig. 1.

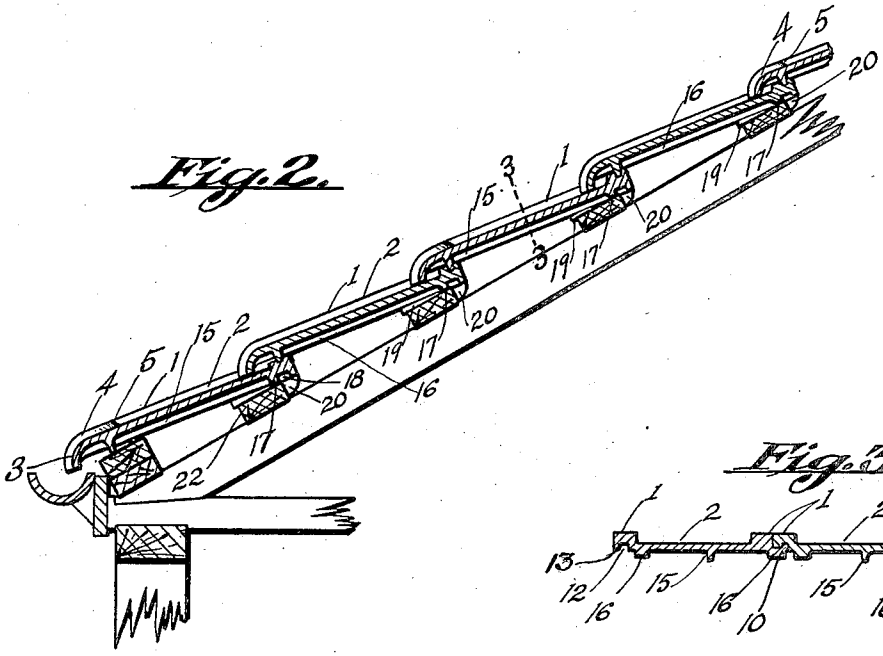


Fig. 2.

Fig. 3.

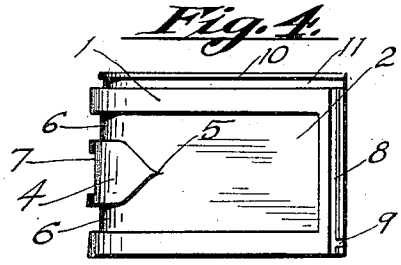


Fig. 4.

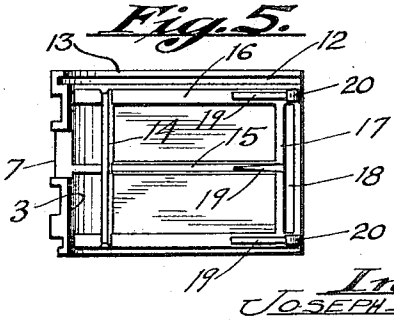


Fig. 5.

Inventors.
JOSEPH SEILER.
EMIL REIFF.
By Hazard & Miller
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH SEILER AND EMIL REIFF, OF LOS ANGELES, CALIFORNIA.

ROOFING TILE.

1,416,583. Specification of Letters Patent. Patented May 16, 1922.

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To all whom it may concern:

Be it known that we, JOSEPH SEILER and EMIL REIFF, citizens of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Roofing Tile, of which the following is a specification.

It is the object of the present invention to provide a roofing tile having novel interlocking means whereby the tiles may be readily laid and connected for forming a roof.

It is a further object of the invention to provide a tile so constructed as to form an efficient drainage for the roof.

The invention will be readily understood from the following description of the accompanying drawings, in which—

Figure 1 is a fragmentary plan view of a roof constructed of the improved tiles.

Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1.

Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

Fig. 4 is a top plan view of one of the tiles.

Fig. 5 is a bottom plan view of the same.

The tiles are, preferably, rectangular and are provided with a rib 1 upon their top surfaces along the sides and rear edge of the same. As a consequence the central portion of the top surface of a tile is recessed as shown at 2. The front edge of the tile is curved downwardly to form a lip 3, and a projection 4 extends upwardly from the surface of the tile medially of the front edge thereof. This projection conforms to the curvature of lip 3, and the rear edge thereof, preferably, tapers to a point 5 at the medial line of the tile. Channels 6 are thus formed at the front edge of recess 2 extending over lip 3 at each side of the central projection 4. The front edge of projection 4 is, preferably, recessed as shown at 7 in order to engage the interlocked side edge ribs 1 of adjacent tiles of the next lower course of said tiles.

The rib 1 at the rear edge of a tile is transversely grooved as shown at 8 and a longitudinally extending groove 9 leading to the rear edge of the tile, preferably, extends from groove 8 in alinement with one of the side ribs 1. At the opposite side edge of the tile a lateral projection 10 extending lengthwise of the tile is formed. This lateral projection is in a plane below the plane of the main portion of the tile and is provided with a longitudinal groove 11.

Upon the under surface of the tile the side rib 1 opposite lateral projection 10 is provided with a longitudinal groove 12 forming an edge lip 13. A cross rib 14 is also provided upon the under surface of the tile spaced rearwardly from the front edge of the tile. This rib may be intersected by a longitudinal strengthening rib 15 extending along the medial line of the tile.

In similar manner ribs 16 may extend longitudinally of the tile adjacent the side edges thereof. At the rear edge of the tile a cross rib 17 connecting ribs 15 and 16 is, preferably, provided, and a longitudinal groove 18 may be formed in said rib. The rear ends of ribs 15 and 16 are, preferably, inclined as shown at 19 in order to form surfaces adapted to rest flat against the sloping frame upon which the tiles are laid. Lugs 20 depending from the under surface of the tile may be provided at the rear edge thereof in alinement with rib 16 in order to abut against the cross members of the roofing frame upon which the tiling is laid.

The tiles may be laid upon a roofing frame which includes the usual cross members 22. The first course of tiles is laid with lip 13 of one tile received in groove 11 of the next adjacent tile. By this arrangement the tiles of a course are interlocked against lateral displacement. The tiles of the next course are then laid with the ribs 1 thereof in longitudinal alinement with the medial lines of the tiles forming the first course. These tiles are interlocked against lateral displacement by lips 13 being received in grooves 11, and the tiles of the two courses are interlocked against longitudinal displacement by receiving the ribs 14 of the tiles forming the second course in the grooves 8 of the first course of tiles.

By this arrangement it will be seen that the projection 4 of the second course will overlie the interlocked side ribs 1 of the first course with the ends of said interlocked ribs received in recesses 7 of said projections 4. The ribs 15 of the tiles forming the second course are received in grooves 9 of the first course of tiles. It will thus be seen that the front ends of each course of tiles are supported upon the rear ends of the next lower course of the tiles. The rear ends of each course of tiles will rest upon

course members 22 of the roofing frame with lugs 20 abutting against said course members to hold the course of tiles against downward longitudinal movement relative to the roofing frame.

By reference to Fig. 1 it will be seen that the construction as thus provided forms drainage means whereby water in each of recesses 2 will flow downwardly and around projections 4 through channels 6 to a recess 2 of the next lower course of tiles. Water is thus prevented from draining on to the interlocked joint between tiles of a course and by flowing over lips 3 the water will quickly drain on to the tiles of the next lower course without the possibility of any water coming in contact with the interlocked joint between tiles of adjacent courses formed by ribs 14 and grooves 8.

A water proof tile roofing is thus formed wherein the individual tiles forming the roof may be readily assembled and interlocked without necessitating the employment of separate locking means.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

A roofing tile comprising a substantially rectangular-shaped body, one end of which is formed with a downwardly curved lip, a U-shaped rib formed on the upper side of the body, a projection on the upper side of the body between the free ends of the rib, said projection having one end recessed and its opposite end tapered, ribs upstanding from the upper side of the body and disposed in spaced relation to the U-shaped rib to provide grooves at one side and one end of the body, transverse ribs on the under side of the body adjacent the opposite ends thereof, longitudinally extending ribs on the under side of the body connecting the transverse ribs and having portions thereof tapered, lugs on the under side of the body at that end remote from the projection end, a groove along one longitudinal edge of the body at the under side thereof, and a second groove extending transversely of the under side of the body between said lugs.

In testimony whereof we have signed our names to this specification.

JOSEPH SEILER.
EMIL REIFF.