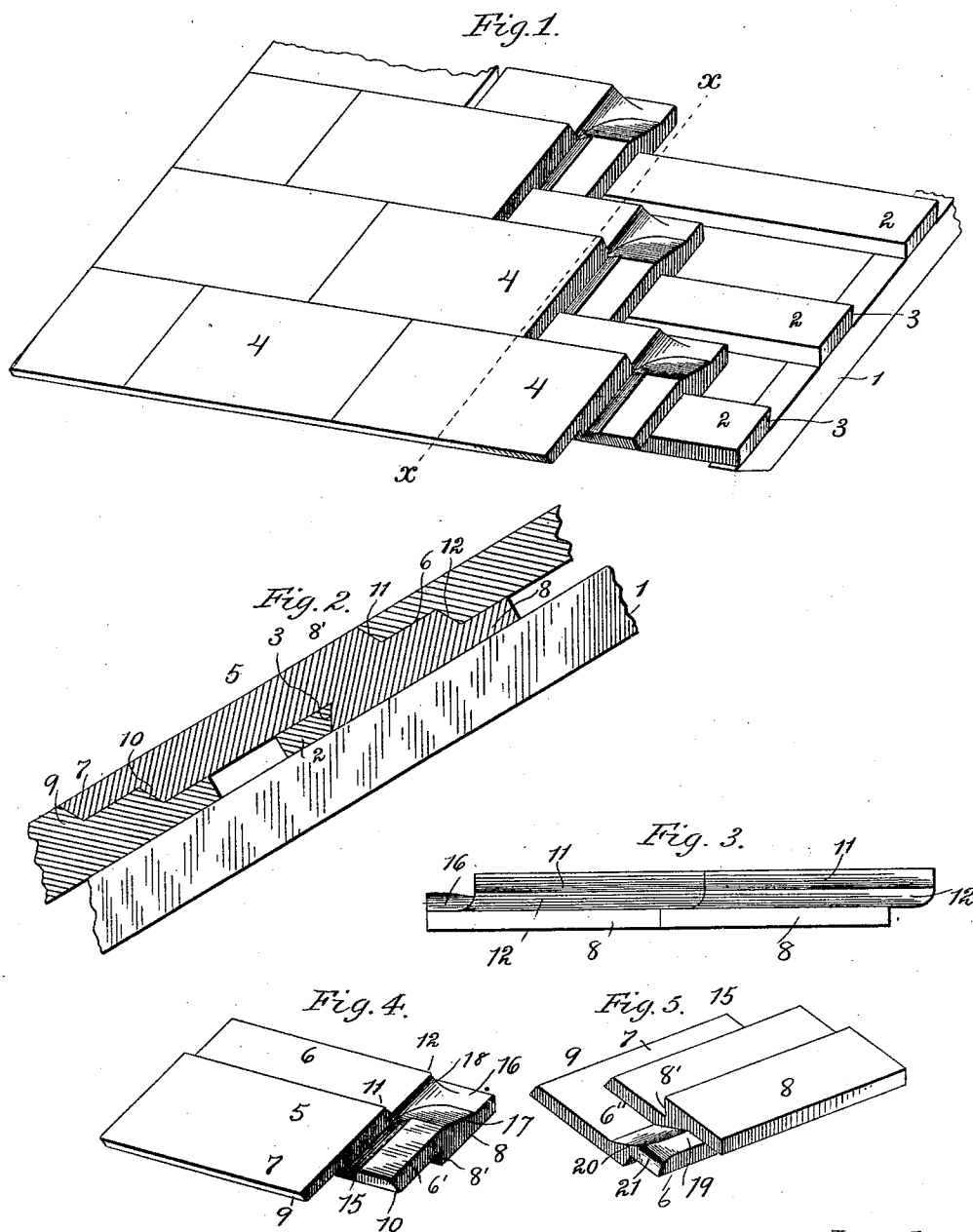


(No Model.)

F. N. MARVICK & J. WALTER.
TILE.

No. 479,441.

Patented July 26, 1892.



Witnesses:

J. R. Stuart.
L. M. Marble.

Inventors:

F. N. Marvick.

John Walter.

By

Marble, Mason & Confill

Attorneys:

UNITED STATES PATENT OFFICE.

FREDERICK N. MARVICK, OF SAN MATEO, AND JOHN WALTER, OF WINTER HAVEN, FLORIDA.

TILE.

SPECIFICATION forming part of Letters Patent No. 479,441, dated July 26, 1892.

Application filed June 22, 1891. Serial No. 397,083. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK N. MARVICK, residing at San Mateo, in the county of Putnam, and JOHN WALTER, residing at Winter Haven, in the county Polk, State of Florida, citizens of the United States, have invented certain new and useful Improvements in Tiles; and we do hereby 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.

Our invention relates to tiles which are adapted to be used for the ceilings, sidings, and roofings of houses, the first object of our invention being to provide a tile which may be secured in place upon or within a building without the employment of nails or screws; second, to provide tiles of the character above noted which are adapted to be so secured and relatively arranged as to break joints with one another and to produce a smooth and even outer surface of finished appearance; third, to insure the escape of water from within the joints or connecting-edges of the tiles, and, fourth, to provide improved means for the adjustment of the tiles in position upon a roof or elsewhere; and it consists in the novel features of construction and combination or arrangement of parts and features hereinafter fully disclosed in the accompanying description and drawings, in which the same reference-numerals indicate the same parts, and in which—

Figure 1 represents a perspective view of a section of roofing made in accordance with our invention; Fig. 2, a vertical section of the same on the line *xx* of Fig. 1; Fig. 3, a rear end view of two tiles as they appear when placed in position; Fig. 4, a perspective view looking at the top surface of the tile; Fig. 5, a similar view looking at the bottom surface of the tile.

In the drawings the numeral 1 indicates one of the roof beams or rafters of a building, upon which are secured parallel strips or ribs 2, having inwardly-beveled upper edges 3, which support and firmly hold the tiles 4 in place. Each of the tiles 4 consists of the body portion 5, the upper flange 6, the side flanges 6' and 6'', and the lower flange 7 and is pro-

vided at its upper end and on its bottom surface with the depending inwardly-beveled support 8, which projects a short distance in front of and also extends a short distance behind the upper flange 6, its beveled inner edge 8' being adapted to fit over the strips or ribs 2, and thus firmly hold said tile 4 in place upon the roof. The lower edge 9 of the flange 7, the shoulders 10 and 11, formed by the junction of flanges 7 and 6 with the body portion of the tile 5, and the shoulder 12, formed by the junction of the flange 6 and the upper end of the rearwardly-extending support 8, are beveled throughout their lengths in a direction opposite to the bevel 8' of said support 8. The side flange 6' has formed in its outer surface the beveled or inwardly-inclined gutter 15 and at the junction of said flange with the flange 6 is formed with a recess or depression 16, which is bounded on two sides by the plane and curved surfaces 17 and 18. The bottom surface of the opposite end 19 of the flange 6 is cut away, forming a depending projection having correspondingly plane and curved surfaces 20 and 21.

In placing the tile in position upon a roof the first or lower course and each alternate course from the eaves to the ridge begin with a half-tile. The second and each alternate course end with a half-tile, as is usual in placing ordinary slates upon a roof, in order to provide break-joints; also, in placing the courses of tiles upon a roof the side flange 6'' of one tile overlaps or rests upon the flange 6' of the next adjoining tile, the plane and curved downwardly-projecting surfaces 20 and 21 of the flange 6' of one tile engaging the plane and curved surfaces 17 and 18 of the recess 16 of flange 6' of the adjoining tile, thus concealing the inwardly-inclined gutter 15, formed therein, the beveled supports 8 of each tile engaging the beveled strip or rib 2 and firmly holding the tiles in position upon the roof. This operation is repeated throughout the entire length of the course of tiles. The curvature of the surfaces 18 and 21 of the recesses and projections above described permits of a very close adjustment of any two tiles with reference to each other in their course by rendering possible the riding of the one tile upon the other until the best adjust-

ment has been reached. The angularity of the surfaces 17 and 20 acts as a support to the tiles from any tendency to slip down the side of the roof by presenting meeting surfaces which only permit of one perfect adjustment. This support is not needed to keep the tiles together in their courses, as there is no tendency for them to slip out of position sidewise after having been properly secured. In placing the next adjoining upper course of tiles in position the lower flange 7 of one of the tiles overlaps or rests upon the upper flange 6 of the next adjoining lower tile, its beveled lower end 9 and shoulder 10 abutting against the shoulders 11 and 12 and the lower bottom surface of the body portion 5 resting upon the forwardly-projecting portion of the beveled support 8.

It will be observed that by this construction of the tiles and the manner of placing them upon a roof all of the securing parts are concealed and that smooth upper surfaces are presented having break-joints; that, while the rows of tiles are held firmly by means of the beveled supports 8 and beveled strips or ribs 2, they may be secured in any other manner; that an important advantage of our invention resides in its capability of application to the interiors of buildings, such as their ceilings and sidings; that this use of our invention not only provides attractive and durable ceilings and sidings, but is especially adapted to the ventilation of rooms or buildings; that the tiles are supported away from the walls a distance equal to thickness of the strips or ribs 2, thus leaving ventilating-spaces between the tiles and the walls; that by leaving spaces below the lowest row and above the uppermost row of tiles currents of air will be produced and maintained, which may be regulated, as desired; that a further advantage of our invention resides in the fact that the tiles are so secured that they are capable of ready removal separately or in rows, thus facilitating repairs and alterations, and that the tiles in their entirety or only upon their outer surfaces may be glazed, colored, and ornamented in any desired manner and design.

Having fully described the peculiarities of construction of our improvement in tiles, their advantages, and the manner of using the same, what we claim as new, and desire to secure by Letters Patent, is—

1. A tile provided with a body portion having upper and lower flanges, said upper flange being formed at one end on its bottom surface with a depending projection which is bounded on two sides by a plane and a curved surface, substantially as described.

2. A tile provided with a body portion having upper, lower, and side flanges, one of said side flanges being formed in its upper surface with a recess or depression which is bounded on two sides by a plane and a curved surface, substantially as described.

3. A tile provided with a body portion having an upper and a lower flange, said upper

flange being arranged in a lower plane than said lower flange, with side flanges, one of said side flanges being formed on its upper surface with an inwardly-inclined gutter, and means for securing said tile to strips or ribs which are fastened to the beams or rafters of roofs, substantially as described.

4. A tile provided with a body portion having an upper and a lower flange and side flanges, said upper flange being arranged on a lower plane than said lower flange, one of said side flanges having formed on its upper surface an inwardly-inclined gutter, and means for securing said tile to strips or ribs which are fastened to the beams or rafters of roofs, said means consisting of a beveled support formed on the bottom surface of said tile, substantially as described.

5. A tile provided with a body portion having an upper and a lower flange and side flanges, one of said side flanges having provided on its upper surface an inwardly-inclined gutter and a recess or depression, as 16, which is bounded on two sides by a plane and a curved surface, and means for securing said tile to strips or ribs fastened to the beams or rafters of roofs, substantially as described.

6. A tile provided with a body portion having upper, lower, and side flanges, said upper flange being formed at one end with a depending projection which is bounded on two sides by a plane and a curved surface, one of said side flanges being formed on its upper surface with a recess or depression which is bounded on two sides by a plane and a curved surface, and means for securing said tile to strips or ribs which are fastened to the beams or rafters of roofs, substantially as described.

7. A tile provided with a body portion having upper, lower, and side flanges, said upper flange being formed at one end with a depending projection which is bounded on two sides by a plane and a curved surface, one of said flanges being formed on its upper surface with a recess or depression which is bounded on two sides by a plane and a curved surface, and a beveled support formed on the bottom surface of said tile for securing said tile to strips or ribs which are fastened to the beams or rafters of roofs, substantially as described.

8. A tile provided with a body portion having upper, lower, and side flanges, said upper flange being arranged in a lower plane than said lower flange and formed at one end, on its bottom surface, with a depending projection which is bounded on two sides by a plane and a curved surface, one of said side flanges being formed on its upper surface with an inwardly-inclined gutter and at its upper end with a recess or depression which is bounded on two sides by a plane and a curved surface, and means for securing said tile to strips or ribs fastened to the beams or rafters of roofs, substantially as described.

9. A tile provided with a body portion, with a flange at its upper end, having a depending

5 projection at one end, with a beveled flange at its lower edge, with side flanges, a recess or depression bounded by plane and curved surfaces, an inwardly-inclined gutter, and a depending beveled support on its bottom surface, in combination with a correspondingly-beveled strip or rib secured to a beam or rafter of a roof, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

FREDERICK N. MARVICK.
JOHN WALTER.

Witnesses:

R. R. REID, Jr.,
CHAS. M. HILLIARD.