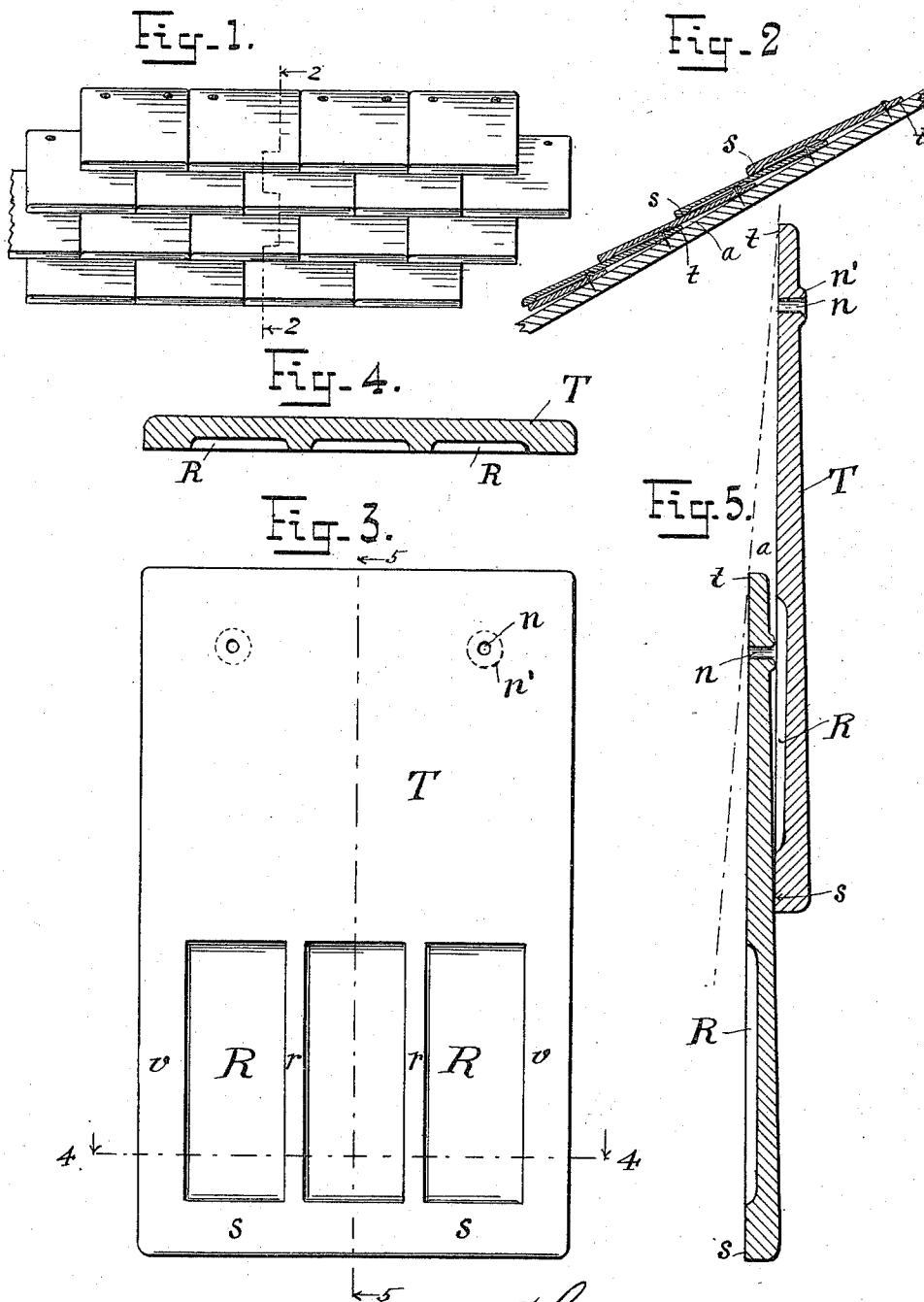


(No Model.)

C. T. HARRIS.
ROOFING AND SHEATHING TILE.

No. 579,481.

Patented Mar. 23, 1897.



Witnesses
Chas. Hanimann, Del.
E. L. Todd.

Charles T. Harris
Inventor
By his Attorney *Chas. M. Corbin*

UNITED STATES PATENT OFFICE.

CHARLES T. HARRIS, OF ALFRED, NEW YORK.

ROOFING AND SHEATHING TILE.

SPECIFICATION forming part of Letters Patent No. 579,481, dated March 23, 1897.

Application filed September 25, 1896. Serial No. 606,958. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. HARRIS, a citizen of the United States, residing at Alfred, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Roofing and Sheathing Tiles, of which the following is a specification.

The invention relates to improvements in tiles for roofing and sheathing and the like, and has special reference to the form or shape of those tiles which are used in a construction similar to the ordinary form of shingle roof.

The use of the common form of tile for such purposes has the great disadvantage of rendering the roof which is constructed of them liable to leak. This is due, primarily, to every tile having one thickness throughout, which causes the under surface of each tile to rest closely and evenly on the flat upper surface of the one below, and so on throughout the roof structure. Each surface contact, therefore, provides a powerful means for extensive capillary attraction between such surfaces for the external water or moisture. In the present invention this difficulty is overcome, first, by forming each tile of gradually-increasing thickness from its inner or upper edge to its outer or lower edge—that is to say, the tile is formed with a plane upper surface and a plane under surface inclined from its outer edge toward said upper surface—and, secondly, by forming one or more recesses or depressions in that part of the under surface of each tile which is directly above the tile beneath. This construction provides for practically the entire separation of each tile from its neighbors above and below with the exception of that place where its outer edge is supported on the tile beneath, thus securing an efficient means for the prevention of harmful leakage.

To aid a proper understanding of my invention, I have illustrated a practical application of the same in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of a portion of a roof constructed of tiles of the improved form. Fig. 2 is a cross-sectional view of the roof on the line 2 2 of Fig. 1. Fig. 3 is an enlarged

view of the under surface of the improved tile. Fig. 4 is a cross-sectional view of the tile on the line 4 4 of Fig. 3. Fig. 5 is a longitudinal sectional view of the tile on the line 5 5 of Fig. 3, showing in addition a similar section of another tile, the two being in such relative positions as they would assume if placed on a roof.

Referring to the drawings, the tile T, of ordinary rectangular shape, is made of gradually-increasing thickness from its inner edge or end *t* to its outer edge *s*, which configuration gives a wedge-like form to its longitudinal contour. In that half of the under surface *v* of the tile near its thicker or outer edge *s* there is formed side by side, preferably, three longitudinal shallow recesses or depressions R R, leaving only the narrow strips *r* of the surface *v* between them. There may be provided near the inner edge *t* of the tile two nail-holes *n n*, each having reinforcing rings or lugs *n' n'* on the upper surface *u*.

The tiles being nailed or otherwise fastened in their proper positions on the rafters A, (see Figs. 1, 2, and 5,) it is seen that each tile is separated from the one beneath and the one above by a distinct space *a* of gradually-increasing depth toward the under side of the roof. It is also seen that the recesses R R provide for an additional or increased space between the tiles having only the edges *s* in contact with the tiles next below. There being, therefore, no surface contact between the tiles moisture or water cannot flow by capillary attraction to pass the edge *s*. The recesses R R also afford means for the protection of the reinforcing-rings *n' n'*.

I claim—

A roofing and sheathing tile having a plane upper surface and a plane under surface inclined from its outer or exposed edge toward said upper surface and a chambered depression on its under surface within the surface contact or overlap of the adjacent tile, whereby moisture or water that is drawn between the contact-surfaces by capillary attraction is arrested, substantially as described.

CHARLES T. HARRIS.

Witnesses:

CHAS. W. FORBES,
WILL R. CLARKE.