

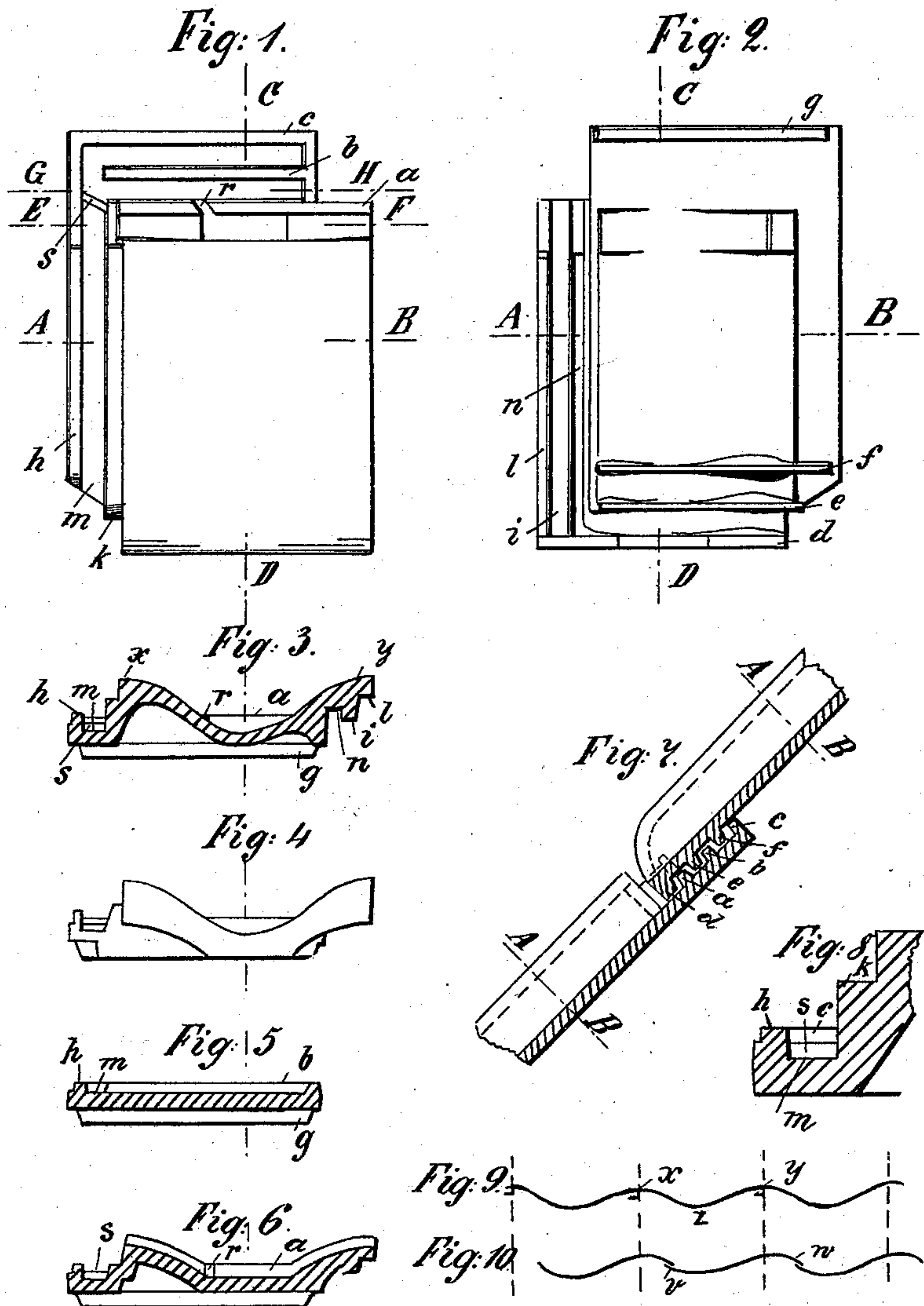
No. 651,873.

Patented June 19, 1900.

W. LUDOWICI.
GUTTER TILE.

(Application filed Mar. 13, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILHELM LUDOWICI, OF JOCKGRIM, GERMANY.

GUTTER-TILE.

SPECIFICATION forming part of Letters Patent No. 651,873, dated June 19, 1900.

Application filed March 13, 1900. Serial No: 8,517. (No model.)

To all whom it may concern:

Be it known that I, WILHELM LUDOWICI, a subject of the King of Bavaria, residing at the city of Jockgrim, Germany, have invented new and useful Improvements in Gutter-Tiles, of which the following is a specification.

My invention relates to gutter-tiles of a wave-shaped cross-section; and the objects of my invention are, first, to provide a perfect lateral and end joint between each two adjacent tiles, and, second, to prevent the water from filling the gutters and flowing over to the inside of the tiles. I attain these objects by the means illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a tile after my invention, and Fig. 2 a corresponding view of its under side; Fig. 3, a sectional view on line A B of Fig. 1; Fig. 4, an end view looking from the lower end of Fig. 1; Figs. 5 and 6, sectional views on lines G H and E F of Fig. 1, respectively; Fig. 7, a longitudinal sectional view on line C D of Fig. 1, showing the cross-joint between two adjacent tiles, the latter being partially broken away; Fig. 8, a broken sectional view on line A B of Fig. 1, showing the left-hand side of the tile in section on an enlarged scale. Figs. 9 and 10 are diagrammatical views, the former showing the arrangement of tiles forming the object of my invention and the latter showing the arrangement of common-shaped tiles in order to explain the essential difference between the two arrangements.

As appearing from Fig. 9 my improved tile is essentially of a wave-shaped cross-section, the raised side portions being jointed together at $x y$, and the depressed portion z forming the middle of the tile, while in Fig. 10 the lateral edges at $v w$ of the shaped common tile are placed in a level beneath the level of the raised portions, simply overlapping each other. The lateral joint is formed by a gutter m and ribs $h k$ at the upper side of the tile to engage with a rib i and the recessed por-

tions $n l$ at the under side of the adjacent tile, and the transversal joint is formed by the engagement of ribs $d e f$ at the under side of the foot of the tile with channels provided between ribs $a b c$ at the upper side of the head of the adjacent tile. By these means the longitudinal gutters m will be placed in continuous lines, and as the rain-water flows along these lines it might occur that the assembled water completely fills the gutters, so as to flow over and enter at the under side of the tiles. In order to prevent this, I have provided a rib s , Figs. 1 and 8, by means of which the water discharged from the gutter m of a tile is prevented from entering the gutter of the next following tile and deflected so as to enter the transversal channel between the ribs $a b$. From the latter channel the water is discharged by a passage r , provided in the rib a , so as to flow downward on the middle depressed portions of the several tiles. However, the ribs s have not the full height of the ribs h , Fig. 8, in order to allow the water to enter the next following gutter and prevent it from flowing over if by accident the passage r should be obstructed. The water will then be deflected by the next following rib s and flow downward, as described.

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

A wave-shaped gutter-tile having raised lateral edges and a depressed middle portion, and provided with a double lateral and a triple transversal joint and with a deflecting-strip arranged in the gutter of the lateral joint, the said deflecting-strip but partially obstructing the gutter.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WILHELM LUDOWICI.

Witnesses:

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