No. 720,831. PATENTED FEB. 17, 1903.

J. N. MAUNTIN.

ROOF TILE.

APPLICATION FILED JUNE 26, 1902.

NO MODEL.

Fig. 1.

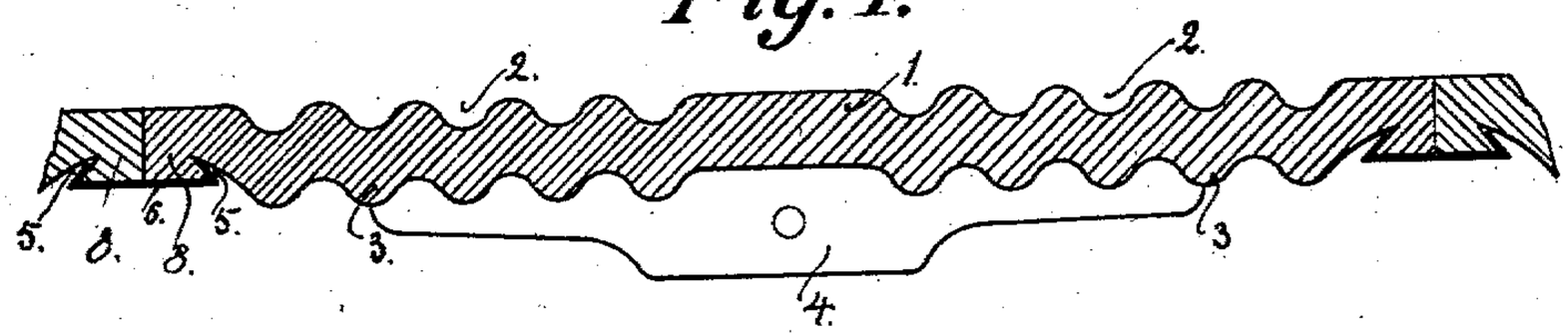


Fig. 2.

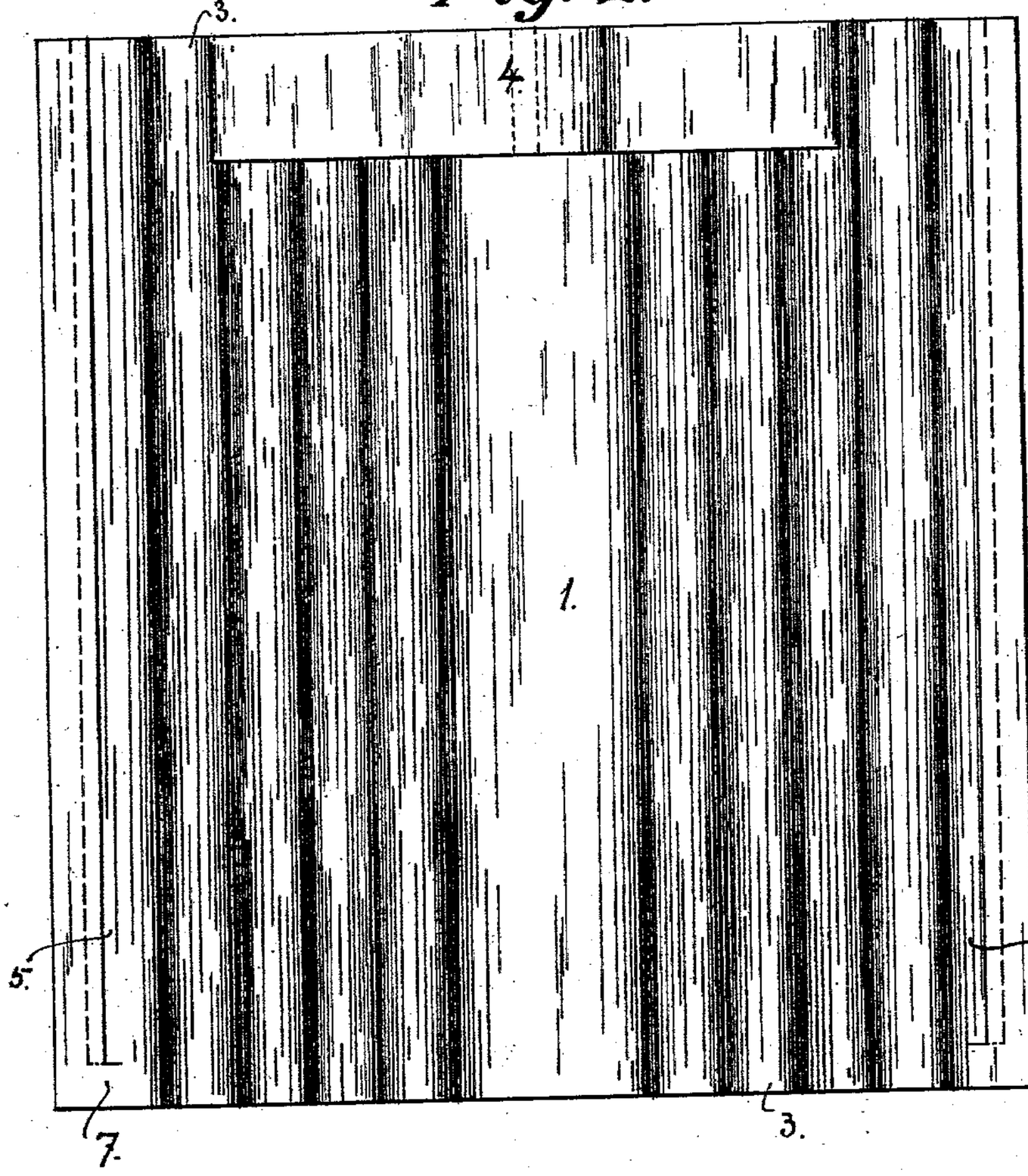
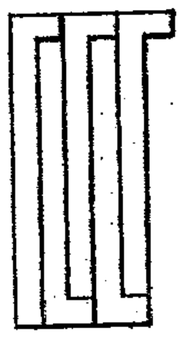


Fig. 3.

Fig. 4.

Fig. 5.



WITNESSES:

Ira W. Aldom

Carrie Judge

INVENTOR.

Jons Nilsson Mauntin

BY Richardson R

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JÖNS NILSSON MAUNTIN, OF GÖTEBORG, SWEDEN.

ROOF-TILE.

SPECIFICATION forming part of Letters Patent No. 720,831, dated February 17, 1903.

Application filed June 26, 1902. Serial No. 113,258. (No model.)

To all whom it may concern:

Be it known that I, JÖNS NILSSON MAUNTIN, manufacturer, a subject of the King of Sweden and Norway, and a resident of Kämpegatan, Göteborg, in the Kingdom of Sweden, have invented certain new and useful Improvements in Roof-Tiles, of which the following is a specification, reference being made to the accompanying drawings.

This invention relates to such roof-tiles as are on their upper side provided with longitudinal channels or flutes for facilitating the running off of the rain-water and at which adjacent tiles are connected to one another by means of chute-shaped pieces, which consist of metal—for instance, zinc—or other suitable material and which clasp ribs which are formed by grooves in the adjacent lateral portions of the tiles.

Roof-tiles arranged according to this invention differ from older roof-tiles of the kind in question, partly therein that they are on their lower side provided with ridges or the like extending from the lower edge of the tile to the upper edge of the same and having such a shape as to correspond to the channels or flutes on the upper side of the tiles and partly therein that the grooves extending along the lateral edges of the tiles and into which engage the chute-shaped pieces, serving to connect adjacent tiles and at some distance from the lower edge of the tiles, in consequence of which the chutes can be open at both ends and need not be closed at their upper end.

Figure 1 shows a cross-section of a roof-tile carried out according to this invention and of parts of the adjacent tiles. Fig. 2 shows the lower side of such a roof-tile, while Figs. 3 and 4 show a plan view and a cross-section, respectively, of a metal chute. Fig. 5 shows some tiles arranged according to this invention and placed close to one another, the fixing-lugs of the tiles being turned alternately upward and downward.

The roof-tile 1 is, as mentioned above, provided with the ordinary channels or flutes 2 for facilitating the running off of the rain-water. On the lower side of the tile there are ridges 3 or the like, which extend from the lower edge of the tile to the upper edge of the same or to the fixing-lug 4, situated at the last-mentioned edge, the shape of these ridges corresponding to the shape of the channels or flutes on the upper side of the tile. By the arrangement on the lower side of the tile of ridges extending from the lower edge to the upper edge or to the fixing-lug, in consequence of which arrangement the shape of the under side of the tile will fully correspond to the shape of the upper side, is gained the advantage that the tiles of two successive layers, one above the other, fit snugly to one another, not only when entire tiles are used, but also when the tiles are cut off, either obliquely, as at the intersection of two oblique roof-surfaces, or transversely, as at a chimney-shaft. The joints between the tiles of two successive layers will therefore become completely tight. Another advantage with the arrangement in question is that breakage of the tiles at their transport is considerably reduced, as the tiles can be placed close to one another, as clearly shown in Fig. 5.

The roof-tiles in question are also characterized thereby that the grooves 5, situated at the lateral edges of the tile and into which engage chutes 6, serving to hold adjacent tiles together, do not, as hitherto, extend to the lower edge of the tiles, but end at some distance from the same, each groove being thus limited at its lower end by a wall 7, Fig. 2. As these walls 7 prevent a sliding downward of the chutes 6 engaging into the grooves 5, the chutes need not be provided with a transverse wall at their one end, but they may instead be open at both ends. By this is attained not only that the manufacture of the chutes will be easier and cheaper, but also that when pushing a chute on a rib 8, formed by the lateral portions of two adjacent tiles, the broader end of the chute may form the forward end, (the one end of the chute is usually somewhat broader than the other,) whereby of course the pushing of the chute on the rib is facilitated. Another advantage with chutes open at both ends is that the chutes may be pulled downward or upward from without when the roof is repaired or altered.

Having now described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

A roof-tile having grooves along its edges extending from its upper edge to a point short of its lower edge to leave an intact portion to act as a stop for the connecting-chute, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JÖNS NILSSON MAUNTIN.

Witnesses:

TH. ÅKERMARK,

V. WESTNESS.