

W. P. GRATH.  
ROOFING TILE.  
APPLICATION FILED OCT. 6, 1902.

NO MODEL.

Fig. 1.

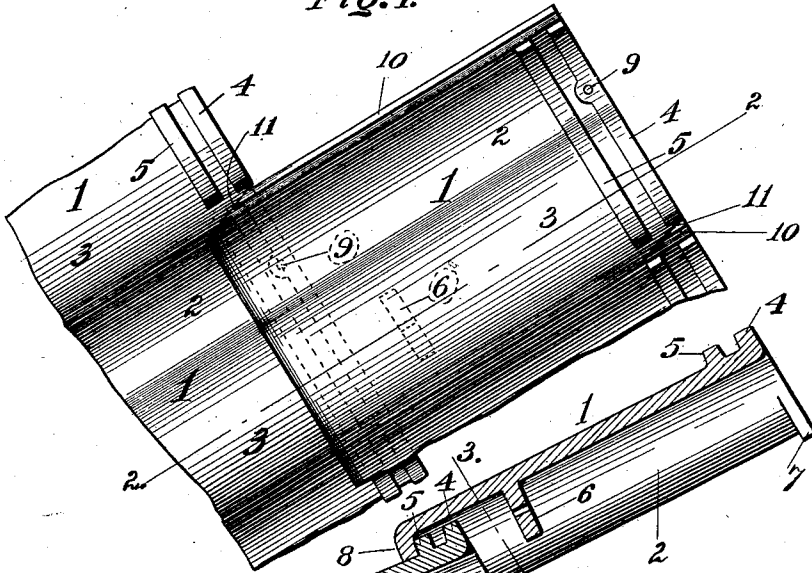


Fig. 2.

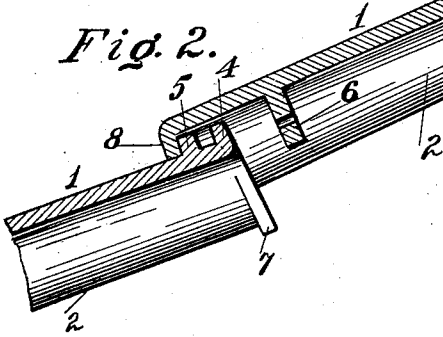


Fig. 3.

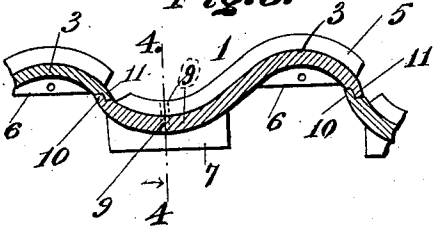


Fig. 5.

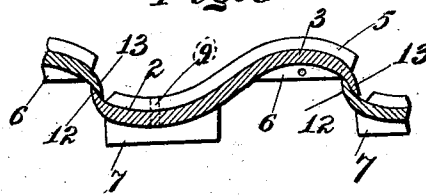
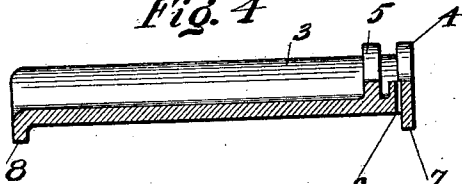


Fig. 4.



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# UNITED STATES PATENT OFFICE.

WALTER P. GRATH, OF ST. LOUIS, MISSOURI.

## ROOFING-TILE.

SPECIFICATION forming part of Letters Patent No. 749,182, dated January 12, 1904.

Application filed October 6, 1902. Serial No. 126,099. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER P. GRATH, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Roofing-Tile, of which the following is a specification.

My invention relates to roofing-tiles, and has for its principal objects to increase the covering area of the tile and to prevent leakage; and it consists in the construction hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a plan view showing one entire tile with the adjacent portions of others. Fig. 2 is a longitudinal vertical sectional view of two tiles and a portion of a third along the line 2 2 of Fig. 1. Fig. 3 is a vertical cross-section on the line 3 3 of Fig. 2. Fig. 4 is a longitudinal section of a tile along the line 4 4 of Fig. 3. Fig. 5 is a vertical cross-section of a modified form of tile.

The general shape of my tile is of the type known as the "S-tile"—that is, the tile 1 is a reverse curve, whose upper surface has a concave portion 2 and a convex portion 3. The upper end of the tile has on its top or upper side two parallel ribs or flanges 4 5, extending continuously across the concave portion and across the convex portion as well. The portion of the tile beneath the top end of the concave upper surface is provided with a rib or flange 7, adapted to fit over the roof stringer or purlin. The lower portion of the under surface of the tile beneath the convex upper surface thereof has a rib or flange 6, which is perforated to receive a wire or other means for fastening the tile to a rafter of the roof. The under surface of the lower end of the tile has a rib or flange 8 extending continuously from edge to edge thereof, so as to interlock with the lower top rib 5 of the tile beneath it. The longitudinal edges of the tile are offset or rabbeted, so as to constitute a tongue and shoulder for each edge. The arrangement of the tongues and shoulders is such that the projecting tongue 11 of the convex portion of one tile will overlap the projecting tongue 10 of the concave portion of the next adjacent tile, and thereby constitute a lock and prevent leakage at the same time.

In order to prevent a leakage of water at the top end of the tile, the nail hole or holes 9 are formed through the topmost rib 4, so that any water which may accumulate in the channel between the two top ribs will drain over the edge of the lower rib 5 rather than through the nail-hole 9.

In order to permit the overlapping of adjacent tiles, the top ribs 4 5 thereof terminate a slight distance from the sides of the tile, and the lower corner on the concave side and the upper corner on the convex side of the tile are beveled, as shown at 11 in Fig. 1.

The construction shown in Fig. 5 is similar to the construction hereinbefore described, except that adjacent edges 12 13 of adjacent tiles overlap instead of being rabbeted, as shown in Fig. 3.

By the arrangement of duplicate ribs at the top of the tile any snow or moisture that may be blown past the lower rib will accumulate in the channel between them, where it will evaporate, or in case of overflow the water will run back over the edge of the lower rib rather than through the nail-hole or over the top edge. Consequently the present tile reduces the extent of overlapping heretofore necessary with tiles of similar type, and the covering capacity of each tile is considerably increased. The rabbeted edges of the tile constitute not merely a lock against lateral displacement thereof, but more thoroughly prevent leakage by reason of the long tortuous passage through which the snow must be blown in order to get under the tile.

What I claim is—

An S-shaped roofing-tile having rabbeted longitudinal edges, a downwardly-extending flange on its lower edge, upwardly-extending parallel ribs at the upper edge of its upper surface, one of said ribs having an enlarged portion and a nail-hole through said portion, a rib at the upper edge of its lower surface adapted to interlock with a purlin and a perforated locking-rib on its under surface near the middle of the convex portion, substantially as described.

WALTER P. GRATH.

Witnesses:

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JAMES A. CARR.