

G. MANVEL.
Roofing-Tiles.

No. 147,061.

Patented Feb. 3, 1874.

Fig. 1.

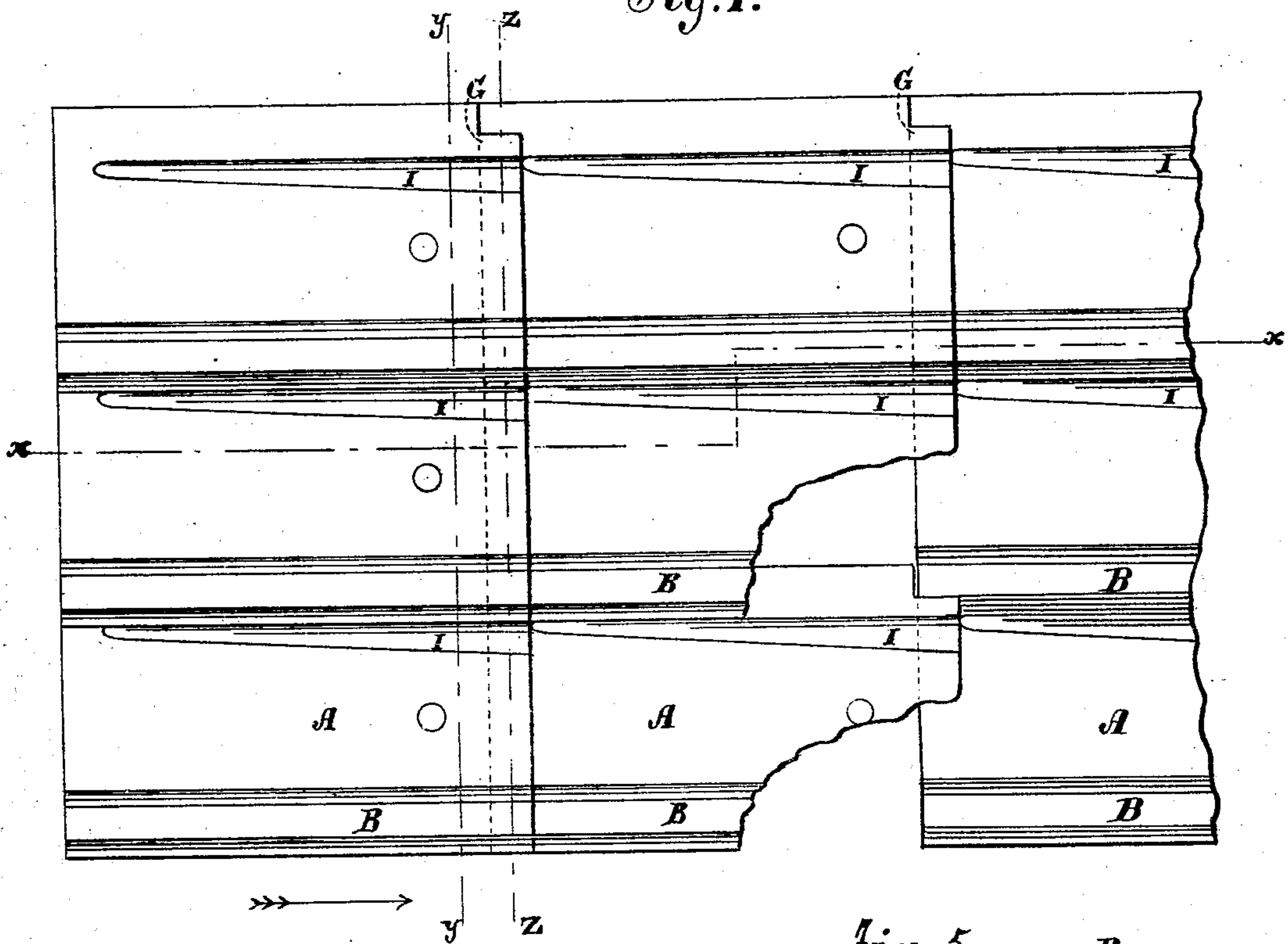


Fig. 5.

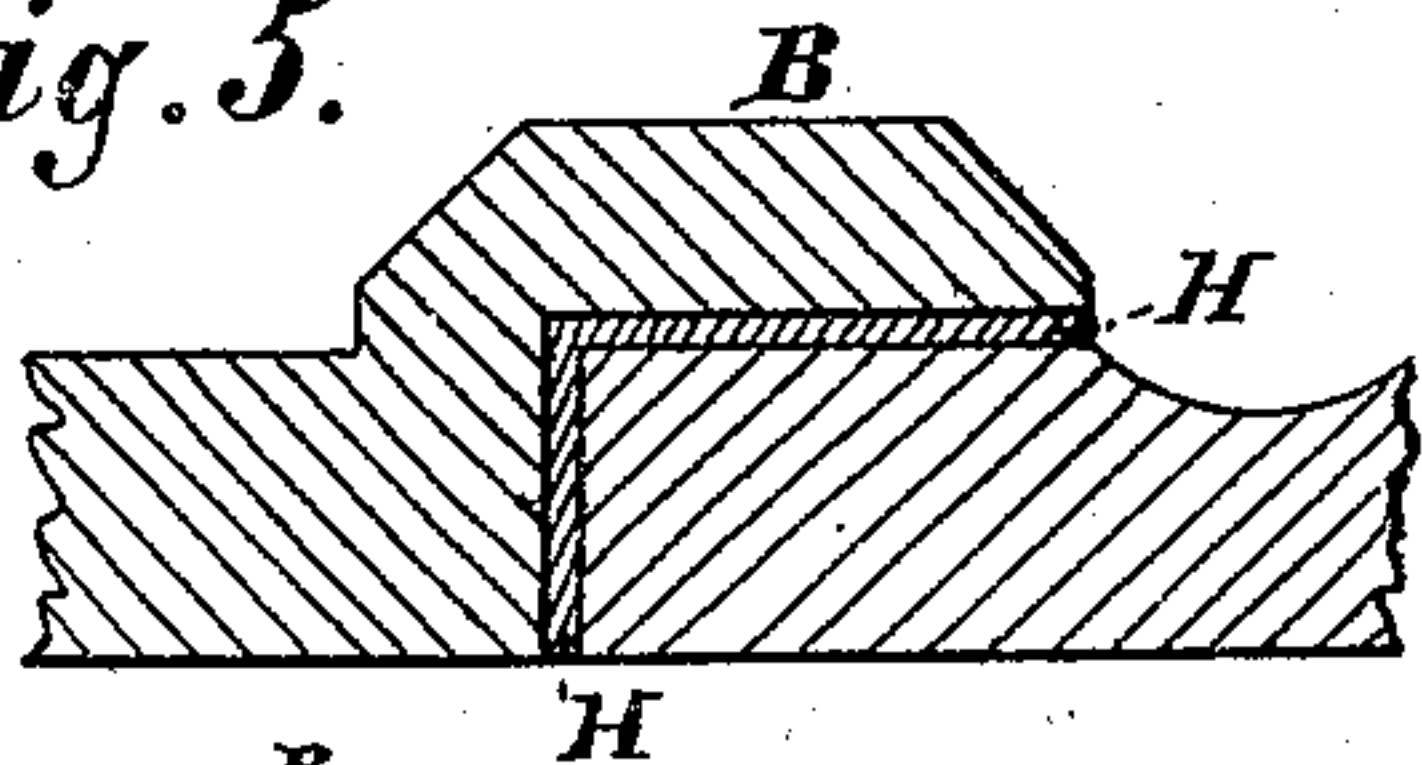


Fig. 2.

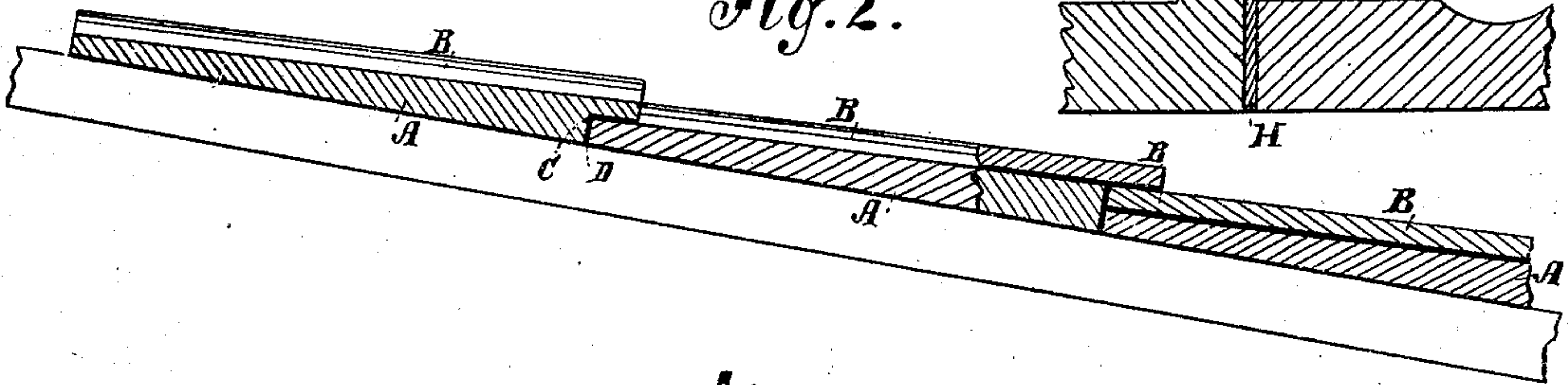


Fig. 3.

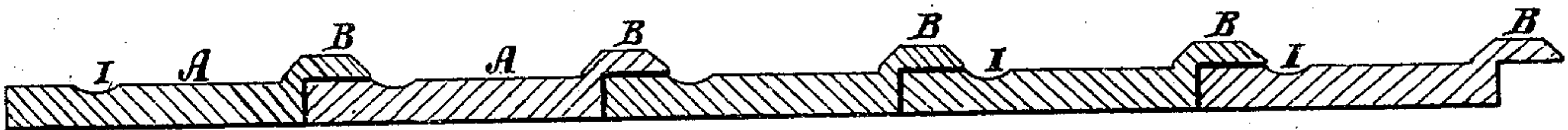
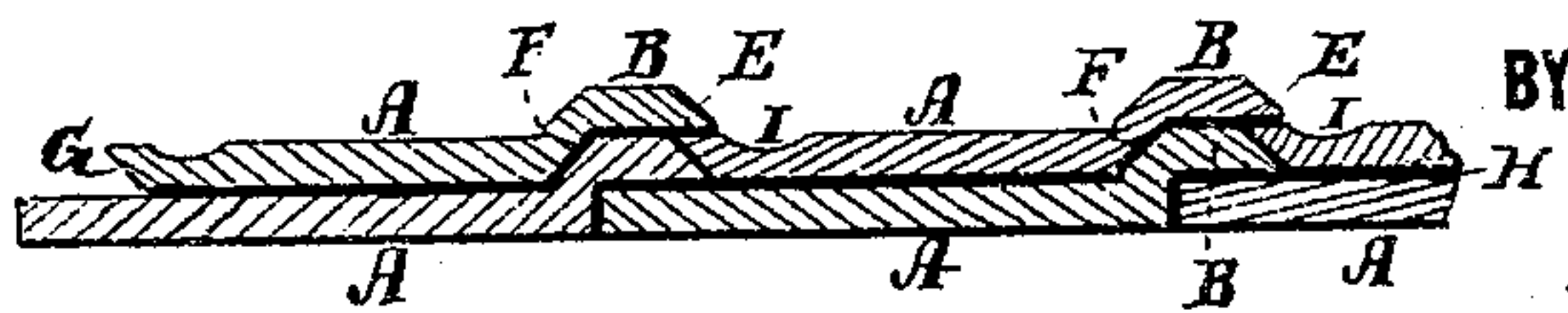


Fig. 4.



WITNESSES.

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GARRY MANVEL, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN ROOFING-TILES.

Specification forming part of Letters Patent No. **147,061**, dated February 3, 1874; application filed November 28, 1873.

To all whom it may concern:

Be it known that I, GARRY MANVEL, of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Tile and Cement Roofing, of which the following is a specification:

My invention consists of molded tiles of clay, glass, or other material, having a raised rib on the top along one edge, projecting beyond the edge, for overlapping the margin of the next tile to cover the joint, the lower side of the rib being flat to correspond with the flat surface of the tile, joined on with a slight space between the rib and the tile, which is filled with cement; and the lower end is provided with a rabbet in the under side to overlap the end of the next tile below, the rabbet having a rise at one corner of the tile, under the rib at the edge, to receive the rib of the lower tile, the wall of the elevated portion of the rabbet being beveled to fit the outside form of the ribs, which are beveled at the corners, and the opposite corner of the tile, which is not ribbed, is notched to receive its portion of the rib of the lower tile, said notch being also beveled to suit the form of the rib. This joint is also secured by cement along the edge of the rib which overlaps the unribbed side of the tile. Each tile is provided with a little groove or gutter for carrying the water away from the joint. The arrangement allows of having the joint-ribs in line from top to bottom of the roof, and is at the same time very simple.

Figure 1 is a plan view of a number of tiles arranged together as on a roof according to my invention. Fig. 2 is a section on the line *x x*. Fig. 3 is a cross-section on the line *y y*; and Fig. 4 is a cross-section on the line *z*, looking in the direction indicated by the arrow.

Fig. 5 is a detail, showing the cement joint clearly.

Similar letters of reference indicate corresponding parts.

A represents the body of the tiles; B, the raised rib, extending from end to end along one margin, and projecting beyond to overlap the margin of the adjoining tile and cover the joint. C represents the rabbet in the lower end to overlap the margin of the upper end of the next tile below and cover the joint D. E represents the raised portion of the rabbet under the rib B, whose wall F is beveled to suit the external shape of the ribs; and G represents the notch in the corner not having a rib to complete the space for the rib of the tile below. Both the joints are cemented together, as shown by the black lines H. I represents the groove in the upper surface of the tile along the margin, which is overlapped by the rib to carry off the water and prevent it from setting back in or against the joint, to protect the cement from the water, and to prevent the water from leaking through in case the cement gives way. The tiles are to be fastened on the roof by nails or screws, countersunk, and covered or made water-tight by cement.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A tile and cement roof made of tile having the overlapping rib B along one edge, a groove, I, along the other edge, and the rabbet C E and notch G in one end, arranged and connected together as described.

GARRY MANVEL.

Witnesses:

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T. B. MOSHER.