

No. 754,578.

PATENTED MAR. 15, 1904.

W. LUDOWICI.  
MEANS FOR COVERING THE VALLEYS OF TILED ROOFS.

APPLICATION FILED JULY 16, 1903.

NO MODEL.

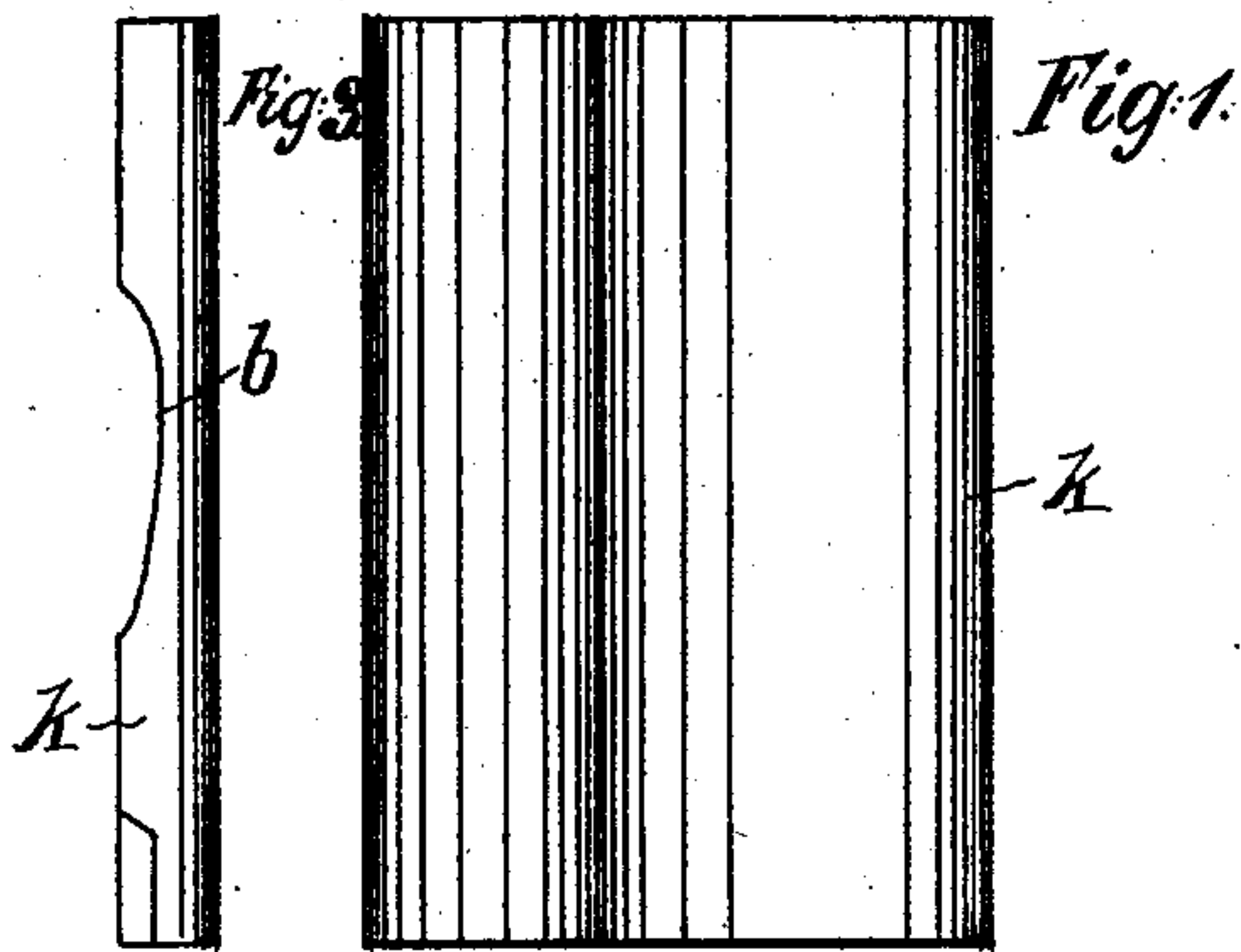


Fig. 4.

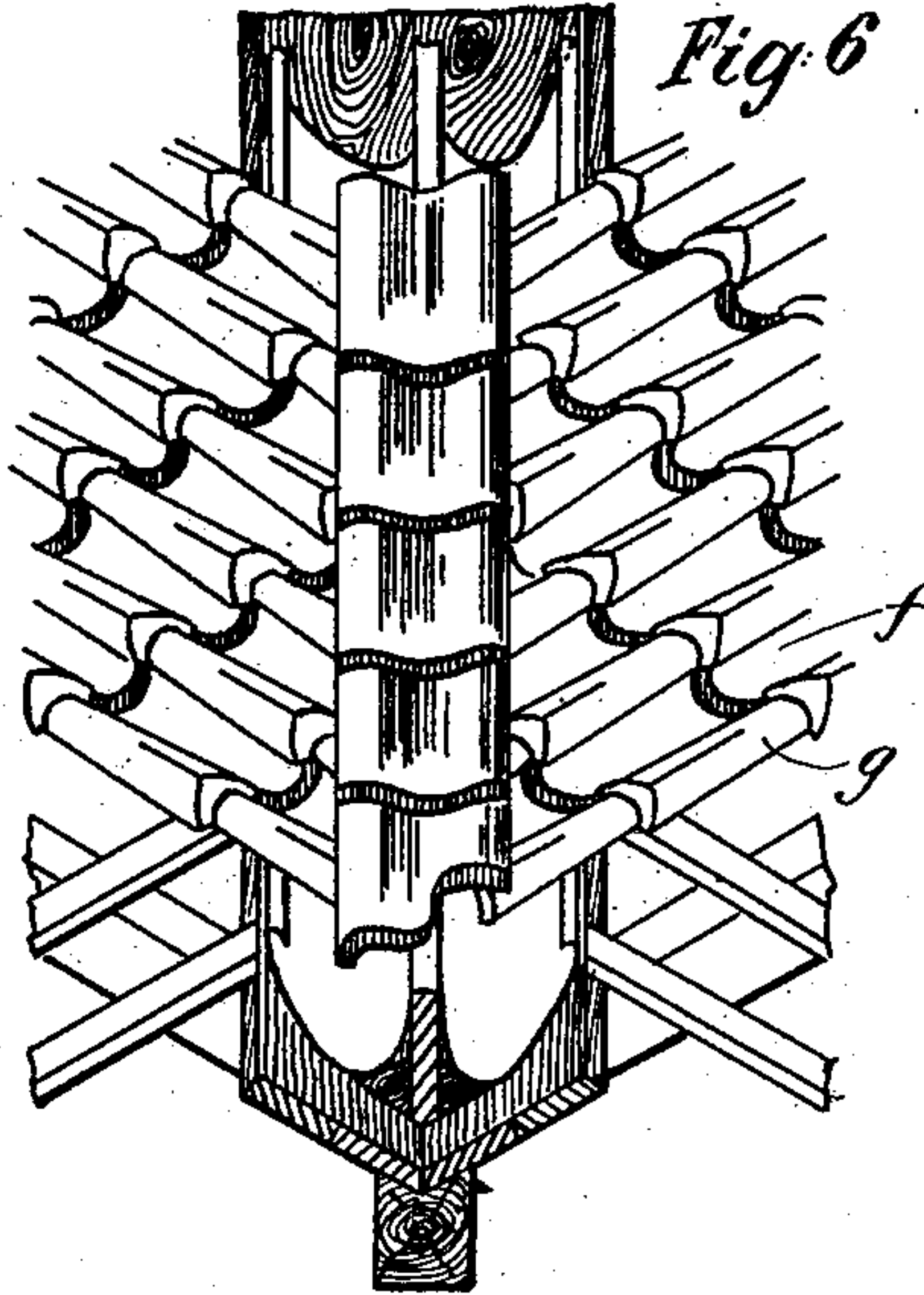
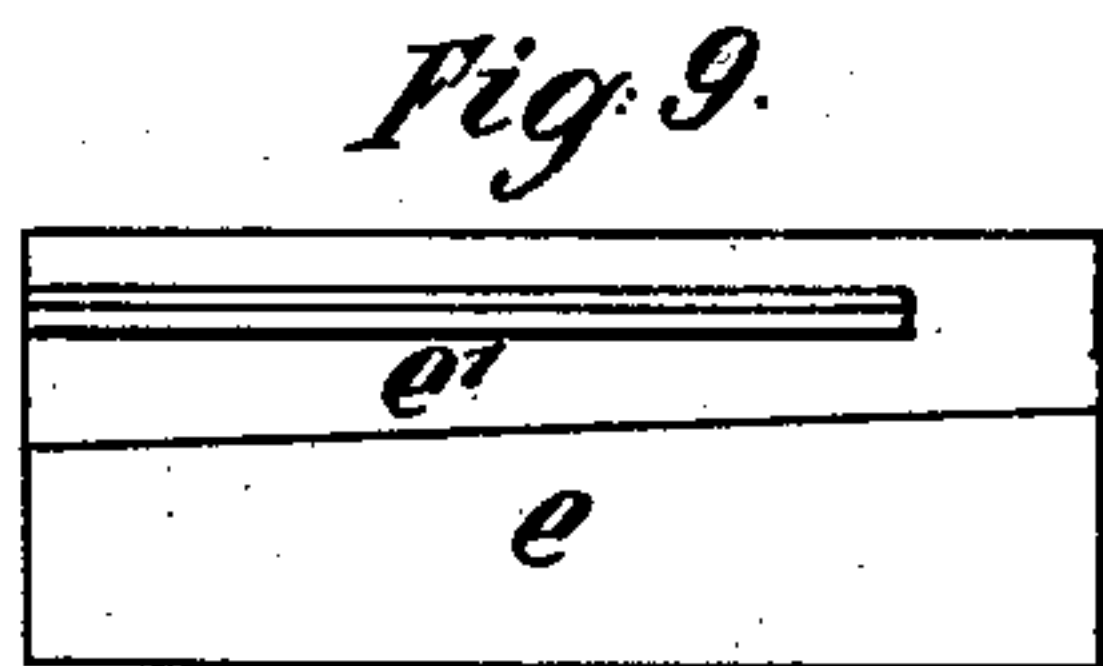
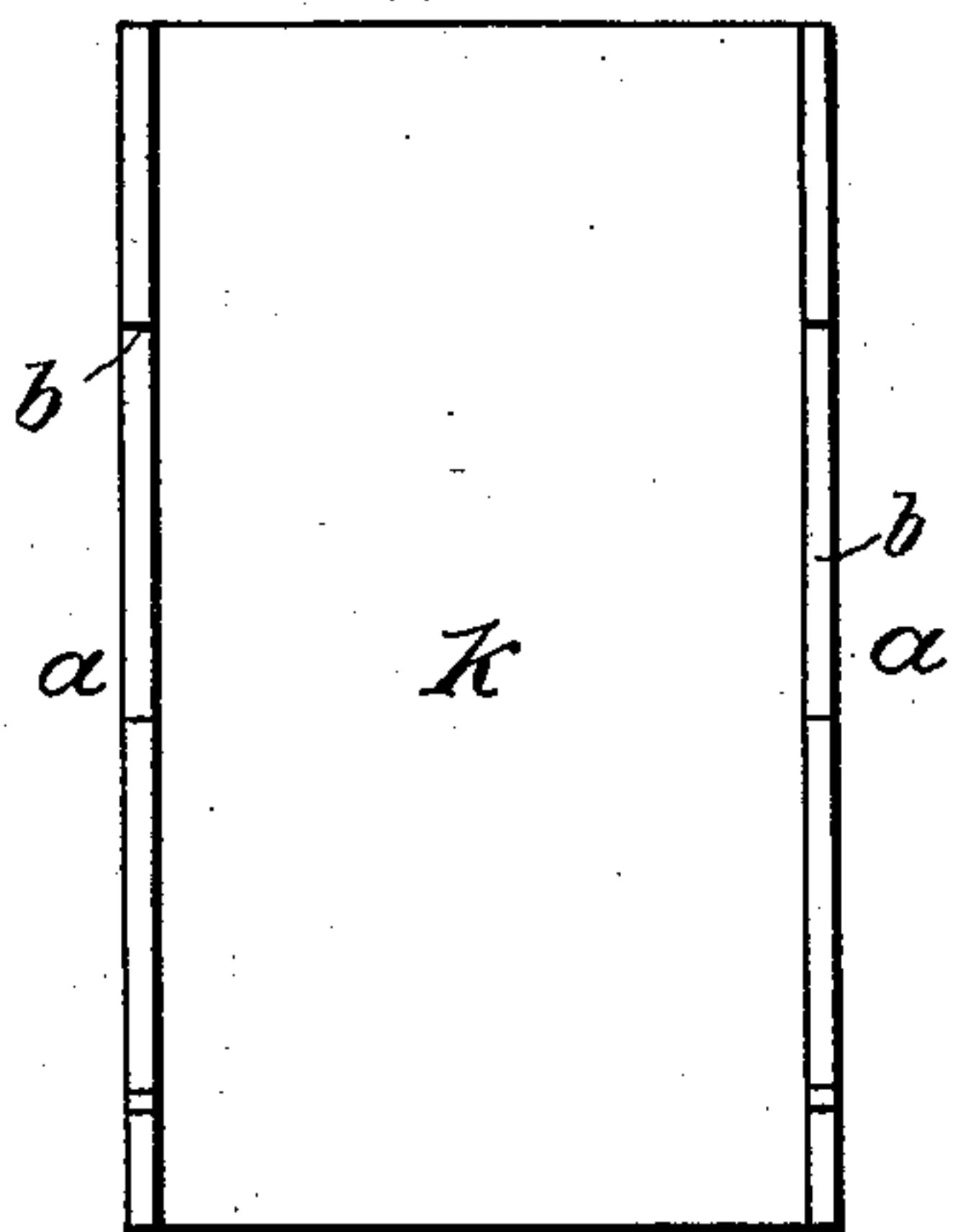
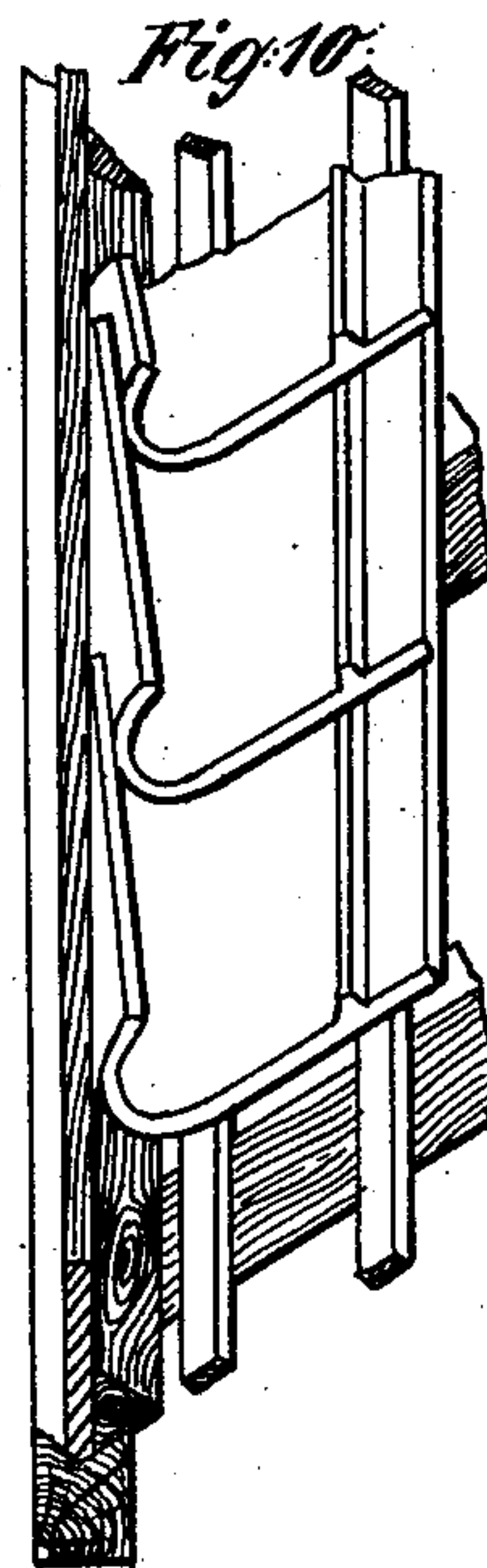
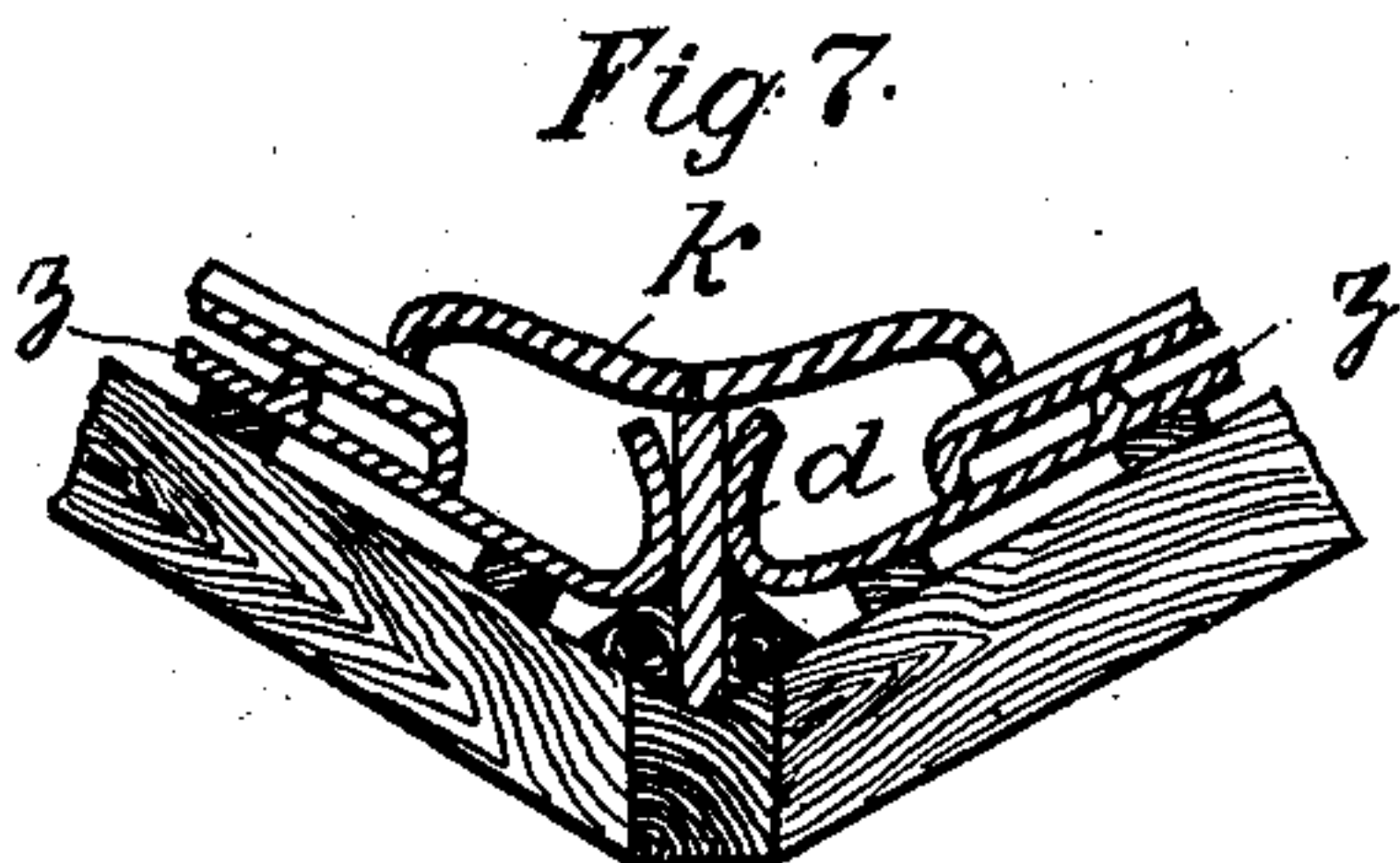
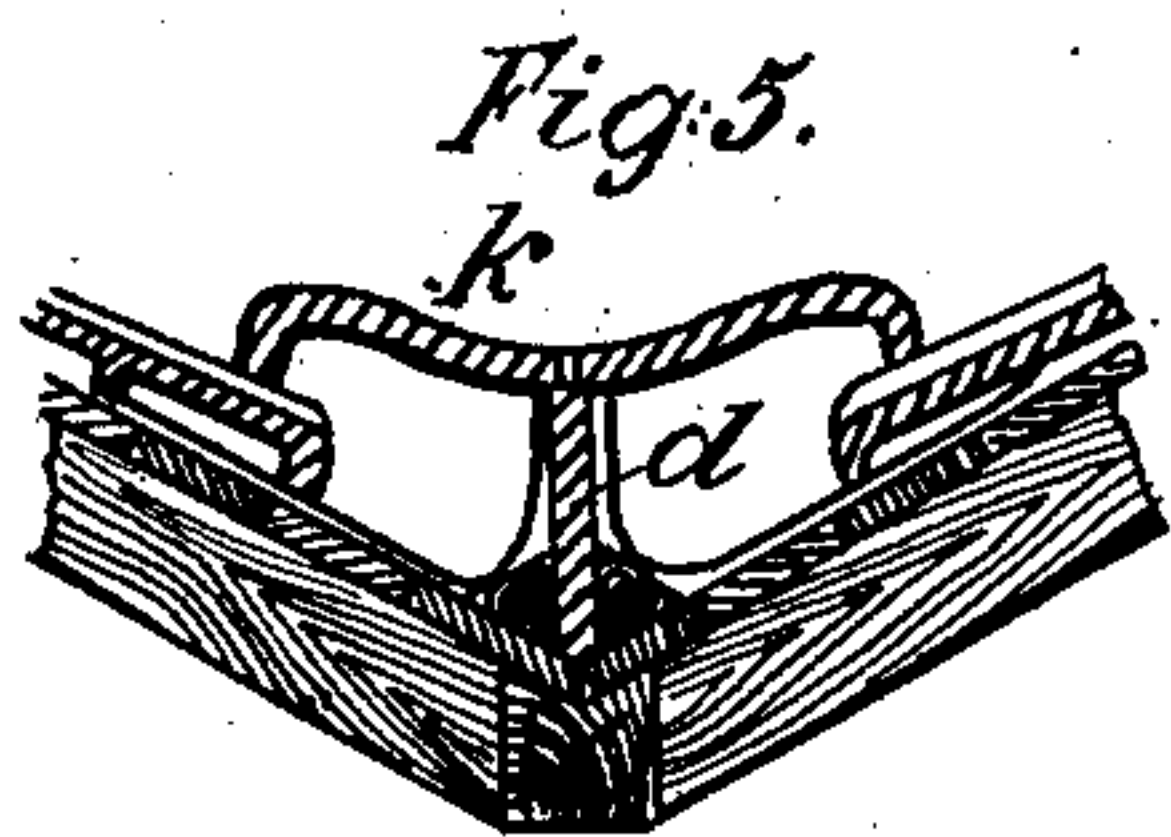


Fig. 9.



Witnesses.

*Attest.*  
*W. Sommer*

Inventor.  
*Wilhelm Ludowici*  
*by [Signature]*



# UNITED STATES PATENT OFFICE.

WILHELM LUDOWICI, OF TOCKGRIM, GERMANY.

## MEANS FOR COVERING THE VALLEYS OF TILED ROOFS.

SPECIFICATION forming part of Letters Patent No. 754,578, dated March 15, 1904.

Application filed July 16, 1903. Serial No. 165,892. (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 Tockgrim, in the Kingdom of Bavaria, Germany, have invented certain new and useful Improvements in Means for Covering the Valleys of Tiled Roofs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in means for covering the valleys of tiled roofs.

The object of my invention is to provide means whereby the sides of a roof which are separated by valleys and are of any angle of inclination are united to form a continuous surface and to form beneath the point of connection a free channel to facilitate the carrying off of the water.

The invention consists in providing a vertical partition located in the center of the valley dividing the latter longitudinally into two parts, in placing covering-plates provided with marginal ribs on both sides over the valley, constructing the ribs so as to permit water to run beneath them, and in placing valley-tiles beneath the covering-plates to receive the water that runs under the ribs of the plates.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a covering-plate. Fig. 2 is a cross-section through the same. Fig. 3 is a side elevation of Fig. 1. Fig. 4 is an under side view of Fig. 1. Fig. 5 is a vertical section of a valley covered according to this invention. Fig. 6 is a plan of a portion of a valley so covered. Fig. 7 is a view similar to Fig. 5, showing a modification of the invention. Fig. 8 shows a section of a tile employed for the modified form of covering. Fig. 9 is an elevation of Fig. 8. Fig. 10 is a part of one-half of the valley portion of a roof illustrating the application of tiles as shown in Figs. 8 and 9.

The covering consists of a plate *k*, having two longitudinal ribs or fillets *a*, as shown in

Figs. 1 to 4. For the purpose of supporting such covering-plates the valley is divided into two parts by means of a vertical partition *d*, Fig. 5, and each part is boarded and provided with a sheet-metal gutter. The bottom row of tiles at either side are then laid, and finally the covering-plates *k* are applied, Fig. 5. The ribs *a* are somewhat hollowed out, as shown at *b*, Fig. 3. The covering-plates *k* rest centrally on the partition *d*, to which they are nailed. The appearance of the covered valley as a whole will then be as shown in Fig. 6. The water can readily run below the ribs *a* through the gaps formed between the ribs of the tile *k* and the concave portion *f* of the roofing-tiles *g*, as shown in Fig. 6 of the drawings, and so reach the covered valley. By this construction, owing to the central partition of the valley, water is prevented from flowing down one side of the roof and overflowing the opposite side of the valley. In the event of snowfall there is always a free channel below the covering-plate for carrying off the water.

The improved method of covering valleys may be employed even with the steepest roofs and with any form of tile. By means of this covering the two opposite sides of the roof are, as it were, connected so as to present a continuous surface.

Figs. 7 to 10 illustrate a method of covering the valley without the aid of metal gutters in the latter. The two channels on either side of the partition *d* are laid with valley-tiles *z*. The flat member *e'* of each tile lies below the bottom roofing-tile, while the rounded part *e* abuts against the partition *d*, Fig. 7. The valley-tiles making up a row, lie one lapping over the other, so that a continuous water-channel is formed, as Fig. 10 shows.

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

1. A tile adapted to cover the valley portion of a roof, comprising a plate having a concave central portion, and longitudinal side ribs formed on its under face parallel to the concave portion, substantially as described.

2. A tile adapted to cover the valley portion of a roof, comprising a plate *k*, having a concave



central portion and convex portions on each side of the concave, and longitudinal side ribs  $\alpha$  on its under face parallel to the concave and convex portions, substantially as described.

5 3. A tile adapted to cover the valley portion of a roof, comprising a plate  $k$ , having a central concave portion longitudinally of the plate and parallel convex portions on both sides of the concave portion, and longitudinal ribs  $\alpha$  having  
10 recesses  $b$  formed therein on the under face of the plate, substantially as and for the purpose specified.

4. In combination with two sides of a roof forming a valley at their meeting edges, and  
15 roofing-tiles on the two sides provided with concave portions; a covering-tile adapted to span the valley and permit water from the roofing-tiles to flow under it, substantially as described.

20 5. In combination with two sides of a roof forming a valley at their meeting edges, and a bottom row of tiles on each side of the valley; a covering adapted to span said valley and rest on the bottom rows of tiles, and valley-tiles  
25 adapted to form two channels beneath the covering-tile, for the purpose specified.

6. In combination with two sides of a roof forming a valley at their meeting edges and a bottom row of tiles on each side of the valley;

a covering-tile adapted to span said valley, 3  
longitudinally-arranged recessed side ribs formed on the under face of the covering-tile adapted to rest on the bottom row of tiles, and a partition centrally mounted in the valley adapted to centrally support the covering-tile, 3  
substantially as and for the purpose specified.

7. In combination with two sides of a roof forming a valley at their meeting edges, a bottom row of tiles on each side of the valley, and a partition centrally mounted in said valley dividing the same longitudinally into two parts; a valley-tile mounted on each side of the partition and having a rounded end portion abutting against said partition and a flat portion supporting the tiles of the bottom row, 4  
a covering-tile having a concave portion resting on the partition, and longitudinally-arranged recessed ribs formed on the under face of said covering-tile adapted to rest on the bottom rows of tiles, substantially as described. 5

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

WILHELM LUDOWICI.

Witnesses:

GEORG KORNER,  
FERDINAND BOESKH.