(No Model.)

M. KAESTNER.

TILE.

No. 502,725. Patented Aug. 8, 1893.

Fig. 1.

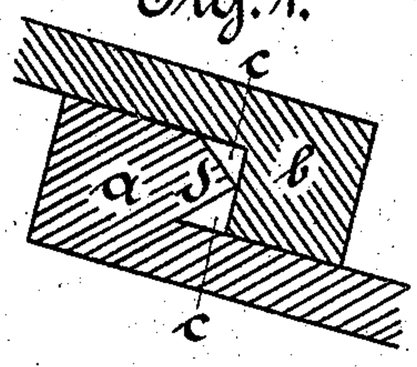


Fig. 2.

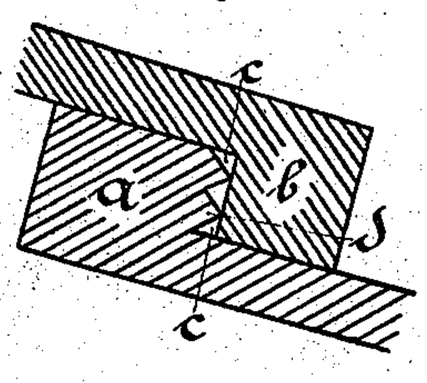


Fig. 3.

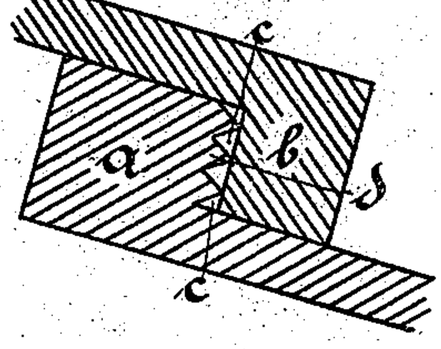
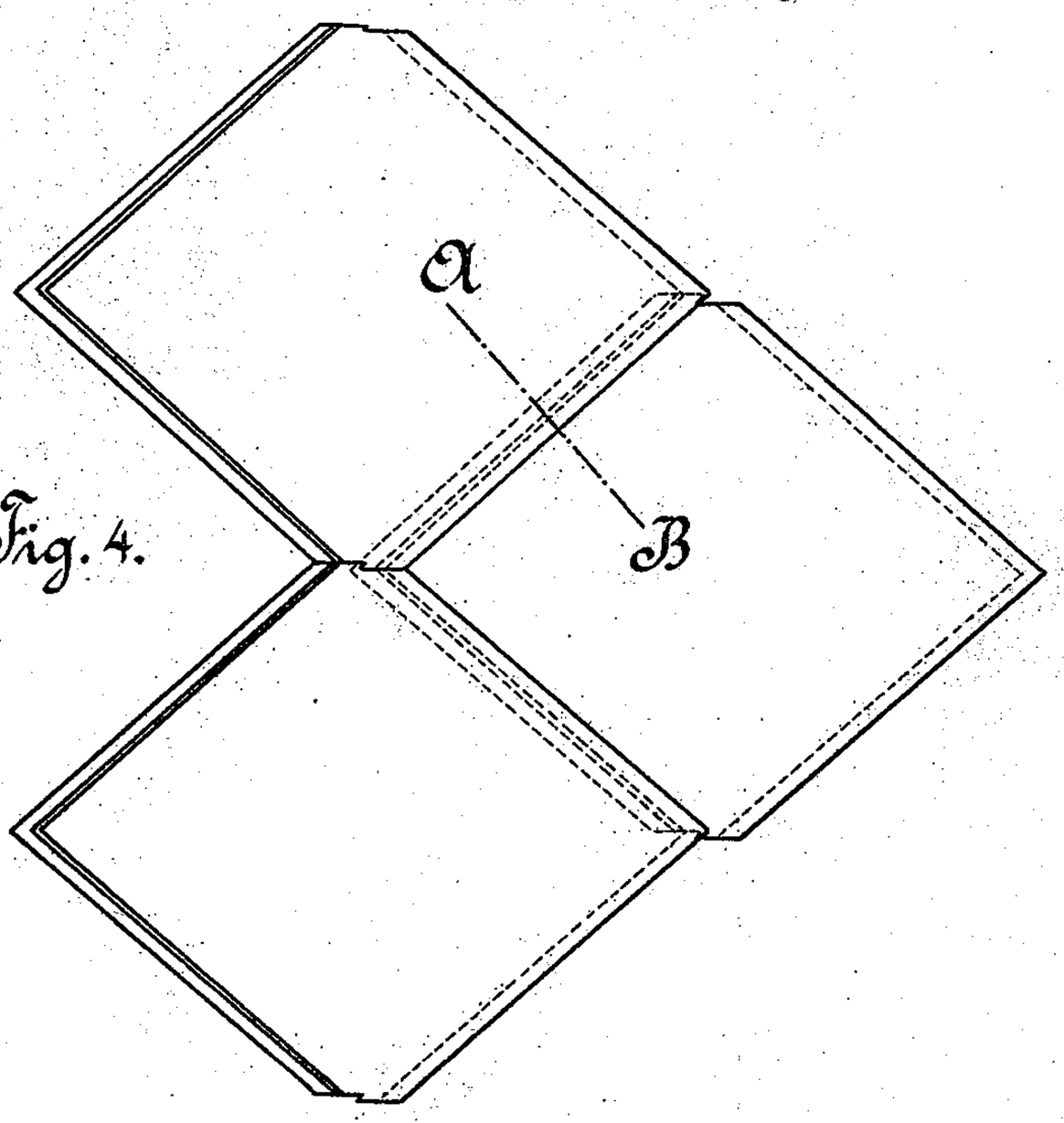


Fig. 4.



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TILE.

SPECIFICATION forming part of Letters Patent No. 502,725, dated August 8, 1893.

Application filed April 8, 1893. Serial No. 469,626. (No model.)

To all whom it may concern:

Be it known that I, MAX KAESTNER, a subject of the German Emperor, residing at Herzogenrath, near Aix-la-Chapelle, in the German Empire, have invented a certain new and Improved Cement Tile, of which the following is a full, clear, and exact specification.

My present invention consists of a tile made of cement and constructed in such manner that when a number of tiles made according to this invention are laid together to form a roof, the uppermost edges of each tile, which are provided with beadings or ledges formed on the upper surfaces of the said tiles, shall grip under downwardly projecting beadings or ledges formed on the under side of the lowermost edges of the tile lying next above it. At the point of contact of the two ledges or beadings against each other, I provide the contacting side of one of the said ledges or beadings, with preferably angular flutings so as to form a series of horizontally running channels against the plain side of the other ledge or beading. By this means rain water driven against the roof by wind and storm, instead of soaking through into the dwellings, workshops, stalls or the like, will be detained in the channels formed between the tiles as previously described. The wind will still have force enough to keep the water, which accumulates in the said channels, in motion, driving it out again, but in no case can it soak through into the interior of the dwelling. The channels have the additional advantage that through the same a better air circulation is attained, which carries off the bad air and gases developed inside the dwellings, workshops, stalls, &c.

In order to make this specification more easily intelligible reference is had to the accompanying drawings forming part of the same and in which similar letters denote similar parts throughout the several views.

Figure 1 is a section along line A B in Fig. 4 showing two channels formed at the point of contact of respective ledges of the tiles. Fig. 2 is the same section showing three channels of the kind referred to. Fig. 3 is a similar section showing four channels. Fig. 4 is a plan view on a smaller scale, of three tiles fitted together.

The tiles which are preferably laid diamondwise (Fig. 4) are each provided along their uppermost two edges with upwardly projecting ledges or beadings *a* having one, two or more flutings on the front side at *d*, and along their lower edges with downwardly projecting plain ledges or beadings *b*. Thus when the tiles are arranged together to form the roof, the undermost ledge of the upper tile will grip over the uppermost fluted ledge of the tile lying underneath it and channels *c* will be formed at the point of juncture of the surfaces of the two ledges. When the tiles are arranged as shown in Fig. 4 they will wedge or dovetail close up together so that the use or employment of mortar to render them tightly fixed, will be unnecessary, as the strongest wind will not be able to displace tiles wedged in together in this manner. The tiles are preferably made of the best Portland cement, and by hand with the aid of cast iron molds. The constancy of volume of cement obviates the warping which takes place in drying and burning clay tiles so that cement tiles can be made to the most exact dimensions and a perfectly tight closure of the roof obtained.

I wish it to be clearly understood that I do not confine myself to any particular number of the channels formed, nor do I confine myself particularly to Portland cement although it is preferable, but other cement may be employed.

I claim as my invention—

A cement tile, having along two adjacent edges an upwardly extending ledge or beading and along the opposite adjacent edges a downwardly extending beading or ledge, one of said ledges or beadings being fluted at its point of juncture with the ledge of the next tile engaging with it in the manner substantially as described and shown.

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

MAX KAESTNER.

Witnesses:
JOHN HECKMANN,
HEINR. SIMON.