

No. 855,475.

PATENTED JUNE 4, 1907.

F. ORLIKOWSKI & L. H. KOEHNLE.  
EARTHENWARE SHINGLE.  
APPLICATION FILED MAR. 29, 1906.

Fig. 1.

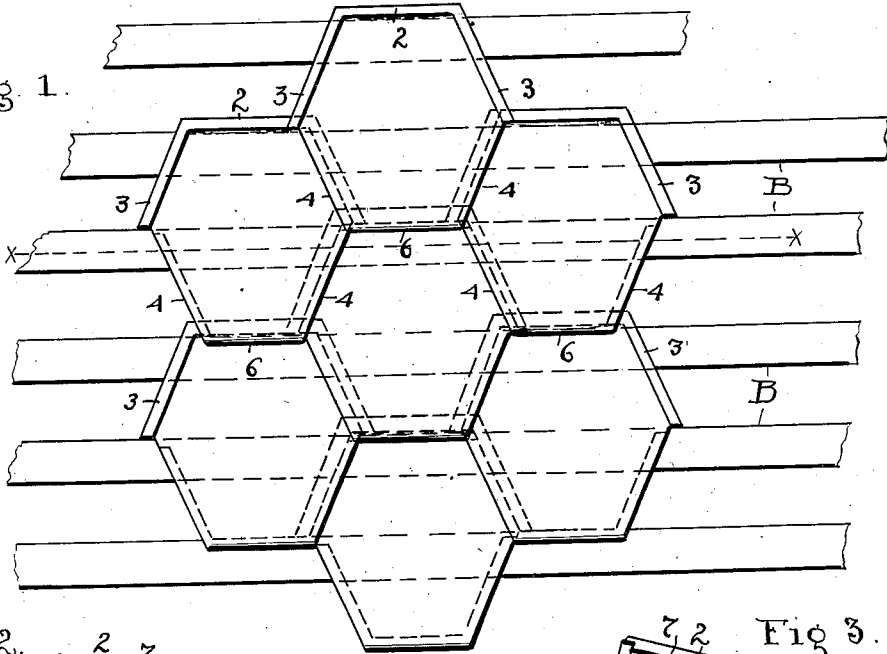


Fig. 2.

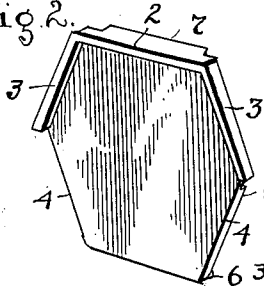


Fig. 4.

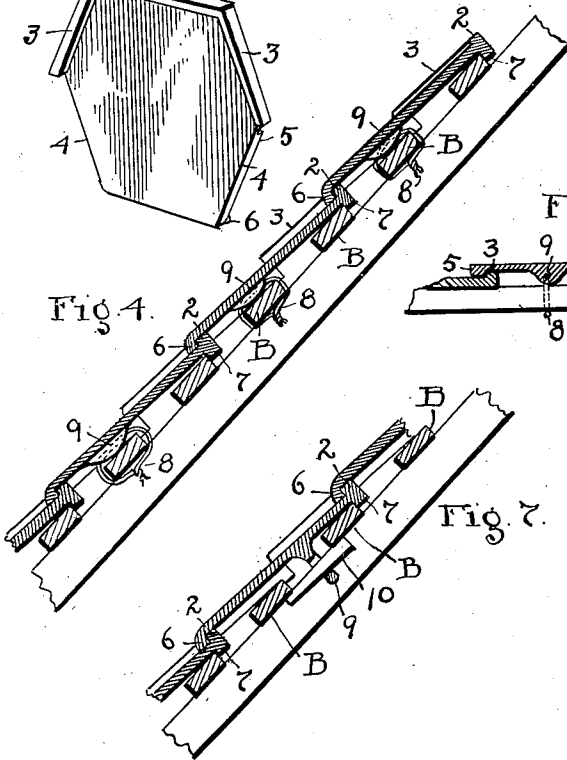


Fig. 5.

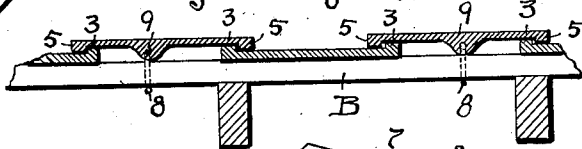


Fig. 7.

Fig. 6.

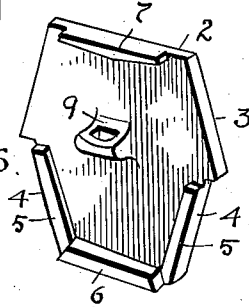
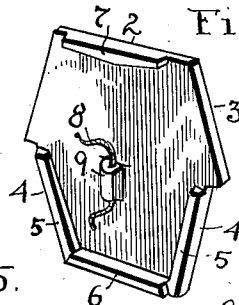


Fig. 3.



ATTEST

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# UNITED STATES PATENT OFFICE.

FRANK ORLIKOWSKI AND LOUIS H. KOEHNLE, OF CLEVELAND, OHIO.

## EARTHENWARE SHINGLE.

No. 855,475.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed March 29, 1906. Serial No. 308,729.

*To all whom it may concern:*

Be it known that we, FRANK ORLIKOWSKI and LOUIS H. KOEHNLE, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Earthenware Shingles; and we do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in earthenware shingles, and the invention consists in a shingle preferably of concrete but may be of tile, clay, or other earthen material molded and prepared substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings Figure 1 is a plan view of a section of a roof covered with our improved shingle. Fig. 2 is a top perspective view, and Fig. 3 a bottom perspective view of one of the shingles. Fig. 4 is a cross section of a portion of roof shown in Fig. 1. Fig. 5 is a section of the roof corresponding substantially to  $x, x$ , Fig. 1, and Fig. 6 is a bottom perspective view of a modification of the invention. Fig. 7 is a cross section of a portion of roof in which this modified form of shingle is employed, the modification being especially as to the means of fastening the shingle.

As thus shown all the several shingles are made after the same pattern and have flat bodies provided with ribs on opposite portions or edges adapting them to be used one with another for the purpose of engaging the shingles operatively together and shedding water, as will now appear. Thus, the top surface of the shingle, seen in Figs. 1 and 2, is perfectly flat, and the shingle is hexagonal in outline and somewhat greater in length than width at its greatest point across its center from side to side. The upper side edges of the shingle diverge or spread from the top downwardly and outwardly, and the shingle has a rib 2 across its top edge and side ribs 3 along its side edges, while the lower side edges of the lower half of the shingles converge toward the bottom of the shingle, and lower converging side edges 4

are plain on their top, but have ribs 5 at their bottom running to the transverse bottom rib 6 across the lower end of the shingle on its under side. There is also an upper bottom rib 7 across the top of the shingle as shown in Fig. 3, so that the side edges have either bottom or top ribs, respectively, while the end edges have a lower rib 6 at the bottom and the upper edge has rib 7 at its bottom. This style of shingle is seen also in Figs. 5 and 6, and the shingle is adapted to be applied to the roof by overlapping its edges as shown in Figs. 1 and 4.

The roof is provided with a series of cross slats B spaced apart according to the size of the shingles and so arranged that the shingles are lapped over from the upper slat to the third one below, at which point the lower transverse rib 6 overlaps the upper rib 2 of the shingles beneath, and the plain edges 4 discharge upon the next two lateral shingles at the side, while the ribs 5 beneath overlap the corresponding ribs 3 of the said side shingles, and thus a close engagement between the shingles is effected and the water from an upper shingle sheds perfectly upon the surface of the next lower ones and no leakage can occur at these points. The shingles are thus held one upon and to another beginning at the lower edge of the roof and going upward, as clearly shown in the several figures, and they are successively tied to their respective slats beneath, preferably by means of wire strands 8 engaged through holes in the lugs 9 at their bottom and with said strands tied about corresponding slats. Or a modification shown in Figs. 6 and 7 may be adopted, where the lug 9 has an opening of such size as to receive a wedge 10 in lieu of the wire strand and adapted to reach from beneath one slat to another and thus fix the shingle in place. Either of these means of fastening the shingle, or some equivalent means, may be employed. Rib 7 is deepest at its center so as to give the shingle a slight rocking position as may be deemed desirable.

What we claim is:—

As a new article of manufacture, an earthen ware shingle hexagonal in form and having ribs along the top and side edges of the upper half of the shingle and ribs along the sides

and bottom of the lower half of the shingle,  
and a rib formed on the lower side of the top  
edge of the upper half of the shingle, said rib  
being tapered from the center toward the  
5 ends thereof, forming an edge adapted to en-  
gage a rafter and permit of said shingle being  
slightly rocked thereon.

In testimony whereof we sign this specifi-  
cation in the presence of two witnesses.

FRANK ORLIKOWSKI.  
LOUIS H. KOEHNLE.

Witnesses:

R. B. MOSER,  
C. A. SELL.