O. O. BURNETT.

CEMENT SHINGLE.

APPLICATION FILED JULY 27, 1903

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www. Hurte. Otis O. Burnett By Minturn Worrner, Attorneys,

## UNITED STATES PATENT OFFICE.

OTIS O. BURNETT, OF INDIANAPOLIS, INDIANA.

## CEMENT SHINGLE.

954,019.

Specification of Letters Patent.

Patented Apr. 5, 1910.

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To all whom it may concern:

Be it known that I, Otis O. Burnett, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Cement Shingles, of which the following is a specification.

This invention relates to improvements in tile or concrete shingles for the roofs of houses, and the object is to provide a shingle which will lie flat for its entire length against the sheeting of the roof, and to provide a shingle which will present a solid appearance at the ends of the roof thereby obviating the use of coping.

Another object of the invention is to provide a secure means for fastening each shingle to at least one strip of sheeting.

In the accompanying drawings which illustrate my invention—Figure 1 is a top or outside view of my improved shingle, Fig. 2 an under side view of same with fastening wire applied, Fig. 3 an edge view of the shingle shown in Fig. 2, Fig. 4 a detail in top plan view of a portion of a roof protected with my improved shingle, Fig. 5 is a detail in cross section of the sheeting, showing an edge view of the shingles which are illustrated in Fig. 4. Fig. 6 is a detail in underside plan view of the roof shown in Fig. 4.

Like characters of reference indicate like parts throughout the several views of the

35 drawings.

The edges a b and c d are parallel with each other. The top of the shingle is formed with the inwardly oblique edges a e and c e forming an angle at the extreme top of the shingle. The bottom of the shingle is here shown as Gothic in outline b f d, but this pattern may be departed from as the case may dictate, without departing from the spirit of my invention. The top or outer face of the shingle is flat and smooth.

The under side of the shingle here shown approximately at its middle is provided with an abrupt off-set or shoulder g h i. The depth of this off-set or shoulder is substantially equal to the thickness of the end a e c of the shingle and the direction of the shoulder g h i is oblique from the two diametrically opposite points g and i of the edges of the shingle downwardly toward the point h in the median line of the shingle. The line g h of this shoulder is parallel

with the edge e c of the shingle and the line h i of the shoulder is parallel with the edge a e whereby the shoulder and top edges will assemble with a close fit in geometrical pat-60 tern which is illustrated in Fig. 6. As shown in Figs. 3 and 5 the shingle tapers in thickness from h to e, and it is reduced in thickness from f to h in a manner to so permit the assembling of the shingles of a 65 roof as to bring all of the under surfaces bounded by the lines g a e c i h in the same plane, which will be a plane common to the outer sides of the roof sheeting.

8 represents the roof sheeting of usual and 70 well known construction, which is applied to rafters (not shown) in the usual manner.

Formed on the under side of the shingle between the angles e and h, and preferably close to the point h, is a lug 10. The side 75corners and upper end of this lug will be preferably rounded, but the lower end of the lug will be square cornered and straight, on a plane at right angles to the side edges of the shingles and also at right angles to the 80 shingle surface bearing said lug. The purpose of the lug 10 is to contact with the top edge of sheeting 8 and form a stop to keep the shingles from sliding off the roof by gravity. The lifting of the shingles by the 85 wind or other agency is prevented by wires 12. These wires are formed with two opposite right-angle bends thereby producing a wire end y which is to be inserted in a suitable hole in the lug 10, a parallel member z 90 to engage the under side of sheeting 8 and a member y at right angles to x and z, which contacts with the upper edge of the sheeting. The lug 10 is provided with a suitable hole (shown by dotted lines in Figs. 2 and 3), 95 for the introduction of the end y, of the wire. This hole does not extend entirely through the lug. An indent is formed in the end of the lug to receive the member x, of the wire and let the latter in flush with 100 the end of the lug and let the latter down against the sheeting. The wires will be inserted as the shingles are placed in position. The end of the wire y is first inserted into the hole in the lug 10, and the opposite pro- 105 jecting end of the wire, with the shingle attached, is then hooked over the sheeting 8.

The construction of concrete or clay tiles or shingles has been such as to form unsightly gaps and spaces under them at the edges of roofs, thereby necessitating the use of a coping along the edges to overlap and

cover the shingles. This is obviated by the snug manner in which my shingles are made

to fit together and fill all spaces.

After the shingles of a roof are assembled they are so interlocked that an individual shingle below the top row cannot be detached without breaking it, due to the manner in which its upper end is lapped under the two shingles next above, abutting the shoulders of said two upper shingles while its shoulder is against the ends of the two shingles next below.

Having thus fully described my invention what I claim as new and wish to secure by

15 Letters Patent, is-

A roof-tile or shingle having two upper end edges of equal length and obliquity and a corresponding under-side V-shaped shoulder to fit said oblique ends, said shingle having an under-side integral lug to rest upon

the top edge of a sheeting-board said lug having a hole for the insertion of a fastening wire, and a notch leading from the outer end of said hole, and a fastening-wire having one end inserted into the hole in the lug 25 the wire being bent outwardly to form a portion which occupies the notch of the lug to permit the lug to contact with the sheeting-board, and said wire being again bent to bring its outer portion into contact with 30 the under side of said sheeting-board.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this 20th day of July, A. D. one thousand

nine hundred and eight.

OTIS O. BURNETT. [L. s.]

Witnesses:

F. W. Woerner, L. B. Woerner.