(No Model.)

## G. C. PLUMMER.

METALLIC SHINGLE.

No. 302,586.

Patented July 29, 1884.

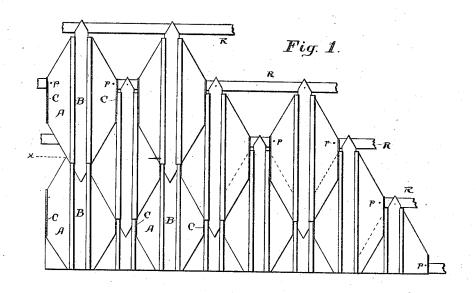
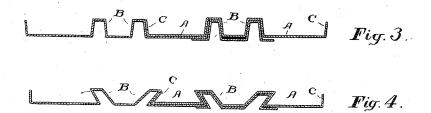


Fig. 2. C A C



Witnesses,

H.Murel

Richa a Soldsbreugh.

Inventor

George & Plummer;
per A.B. Vopham.
His attorney.

## UNITED STATES PATENT OFFICE.

## GEORGE C. PLUMMER, OF BRIMFIELD, ILLINOIS.

## METALLIC SHINGLE.

SPECIFICATION forming part of Letters Patent No. 302,586, dated July 29, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. PLUMMER, of Brimfield, in the county of Peoria, in the State of Illinois, have invented an Improved Metallic Shingle; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer 10 to like parts, and in which-

Figure 1 represents a plan view of shingles secured in place; Fig. 2, cross-section of a shingle; Figs. 3 and 4, cross sections of shingles in

My invention is in that line of coverings for the roofs and sides of buildings in which separate metal shingles are so formed as to permit them to be not only nailed to the building, but also securely fastened to each other.

My invention relates to the means whereby the shingles may be fastened to each other, and also to such a construction as shall prevent the rain from being blown in sidewise

under the shingles.

The shape and size of my shingle is not an essential point in the construction. The shape may be rectangular, or some other geometrical figure, in which are two parallel lateral edges. It is the prevention of the lateral beating of 30 the rain in under the shingles that is one object of these parallel edges, which are bent up at right angles. The joining together of two shingles is done by means of these edges and two parallel ridges running longitudinally

In the drawings, A A, &c., represent the shingles, C C the bent edges and B B the

35 along the center of each shingle.

The general shape which I prefer for my 40 shingles is that of a rhombus having a portion of its obtuse angles cut away. These are the edges C, which are bent up parallel with each other.

In Fig. 2 is a transverse section of my shin-45 gle, and by which is shown the edges C C bent up at right angles to the body of the shingle. This also shows the form of the ridges B B.

In nailing these shingles to the roof I secure the lower horizontal row first by driv-50 ing a nail through the shingles at each point p, the shingles being at such a distance apart that the bent edges C C would abut against the opposite sides of the ridges B B of a shingle placed over them. The next row of shin-55 gles is placed over them far enough to cover |

their nails, the bent edges C C entering the ridges B B of the superior shingles, but the bent edges CC of the superior shingles abutting against the outside faces of the ridges B B of the shingles below, this row being also secured 60 in place on the roof by nails through them at p p, &c. Another row of shingles is secured in the same way above this. In this latter row, however, their ridges B B clasp within them not only the bent edges CC, but also the 65 ridges B B of the row first put on, as shown in the drawings. Having nailed this latter row in place, I proceed as before until the whole roof is covered. Now, to bind the shingles together and keep their lower ends firmly down 70 in place, I knock these ridges B B over sidewise away from each other in each pair, as shown in Fig. 4. This deflection may extend throughout the entire lengths of the ridges, or simply at the lower end of each shingle; but 75 whichever way it is done the shingles are thoroughly and permanently fastened together. Even should both nails of a shingle get rusted off, the shingle would still be immovably held in place. As shown in Fig. 4, this bending 80 over of the ridges B B forms in effect a dovetail joint, by which the upper shingle is fastened to the one beneath, and also to the ones at its sides. At the upper and lower edges of the roof I have shingles cut transversely in 85 two, by which are filled the V-shaped spaces otherwise left by the shingles.

What I claim as my invention, and for which

I desire Letters Patent, is as follows:

1. As a roof and side covering, shingles A, 90 of sheet metal, having bent-up lateral edges C C and longitudinal parallel ribs B B, and adapted to be combined, in their application to a building, substantially as described.

2. In a metal shingle, two ridges, BB, run- 95 ning parallel through the center of the same, whereby, upon bending them over away from each other, said shingle is clamped to a simi-

lar one subjacent thereto.

3. The approximately diamond-shaped shin- 100 gle A, having bent edges CC and central parallel ridges, B B, as and for the purpose set

In testimony that I claim the foregoing invention I have hereunto set my hand this 19th 105 day of November, 1883. GEORGE C. PLUMMER.

Witnesses:

A. B. UPHAM, JOHN KELLY,