H. W. SHEPARD.
Metallic Shingle.

No. 207,989. Patented Sept. 10, 1878.

Figure 1.

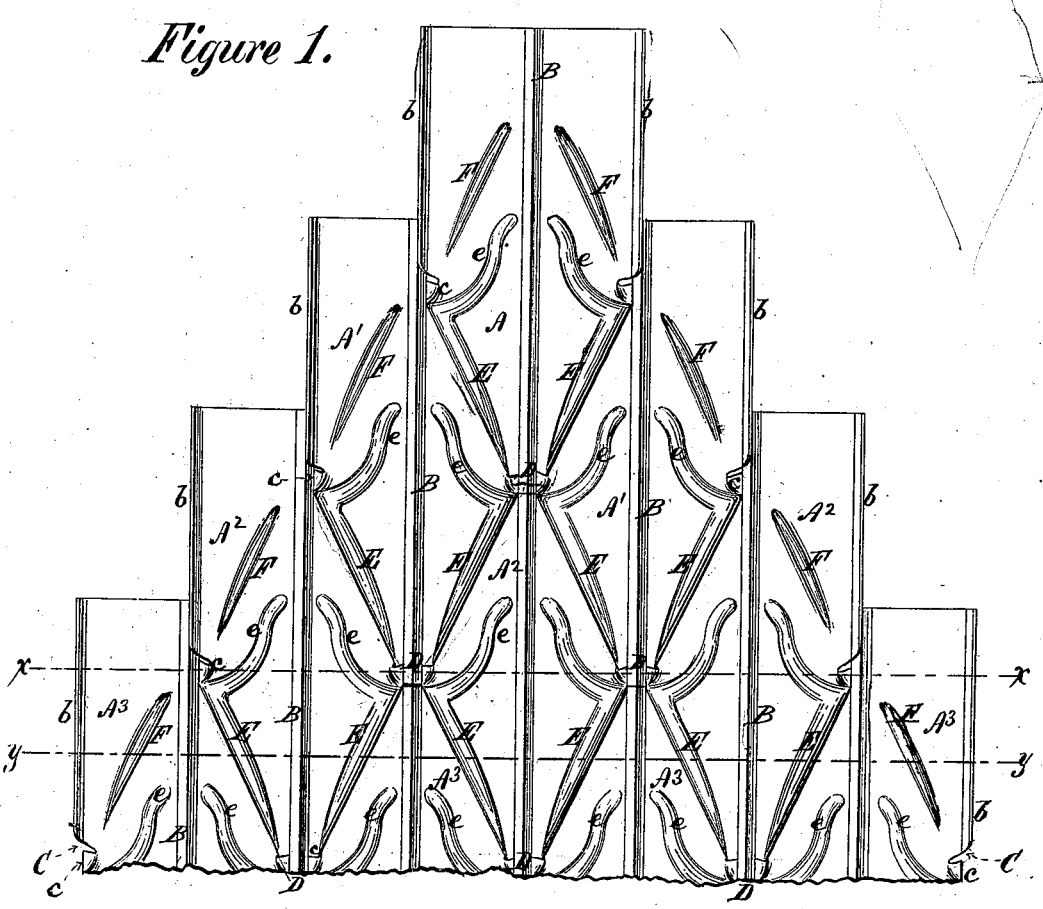


Figure 2.

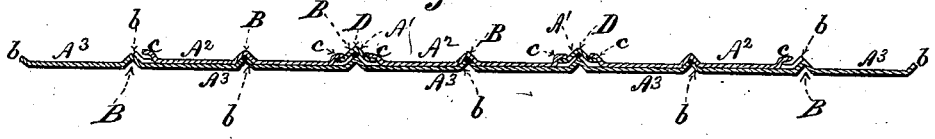
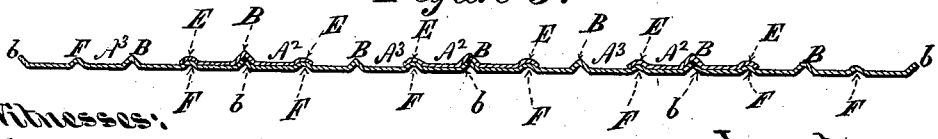


Figure 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY W. SHEPARD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN METALLIC SHINGLES.

Specification forming part of Letters Patent No. **207,989**, dated September 10, 1878; application filed May 16, 1878.

To all whom it may concern:

Be it known that I, HENRY W. SHEPARD, of Brooklyn, New York, have invented certain Improvements in Metallic Roofing-Shingles, of which the following is a specification:

My improvements relate to the sheet-metal diamond-pointed shingles which have heretofore been made with a central hollow rib, and with raised sides, as shown in Letters Patent of the United States No. 194,766, granted to C. Comstock, September 4, 1877; and my invention consists, first, in transversely slitting the obtuse corners of such shingles, and thus providing them with tongues for lapping over and holding down the points of the shingles in the next immediately-following course; secondly, in forming hollow ribs along the inclined edges of each shingle, for the purpose of assisting in stiffening and holding down its pointed end; and, thirdly, in forming slightly smaller ribs in a reverse direction from each of the obtuse corners of the shingle diagonally upward, the object of the smaller ribs thus formed being to enter the grooves on the under sides of the ribs along the inclined edges of the overlapping shingles, and thus, while adding stiffness to the shingle, serving to prevent rain from driving upward between the courses.

The accompanying drawings are as follows: Figure 1 is a top view of a portion of four consecutive courses of shingles containing my improvements. Fig. 2 is a section through the line *x x* on Fig. 1. Fig. 3 is a section through the line *y y* on Fig. 1.

For convenience of illustration, the drawings show but one shingle, A, in the upper course, two shingles, A^1 A^1, in the next course, three, A^2 A^2 A^2, in the next course, and the upper portions of four, A^3 A^3 A^3 A^3, in the next course. Each shingle is provided with a central longitudinal hollow rib, B, and has its parallel edges *b b* turned upward, so that the adjoining edges of two shingles enter the longitudinal groove on the under side of the rib B in the overlapping shingle. It will be seen that near the obtuse corners of each shingle there is a transverse slit, C, and that the metal below the slit is sprung upward to allow the point D of the overlapping shingle to pass under it. The metal thus sprung upward forms the pointed tongue *c*, which laps over the lower corners of the pointed end of the overlapping shingle on either side of the lower end of the central rib B.

Along the inclined edges of each shingle the hollow ribs E E are formed. The ribs E E terminate at their lower ends at a short distance above the pointed end of the shingle, and at their upper ends are turned inward, forming the curved hollow ribs *e e*. The inwardly-curved ribs *e e* have the two objects of stiffening the shingle and improving its appearance.

The ribs E E along the inclined edges, in addition to these objects, are further intended to receive the ribs F F in the two underlying shingles, which the pointed end of each shingle rests upon. The ribs F F, it will be seen, extend inward and upward from the obtuse corners of the shingle, and are fitted by their location and by their dimensions to enter the grooves on the under sides of the hollow ribs E E. The ribs F in one course of shingles thus engaged by the ribs E in the next following course of shingles tend to prevent rain from being driven upward between the courses.

I claim as my invention—

1. A metallic roofing-shingle, substantially such as described, provided with the tongues *c c*, substantially as and for the purposes set forth.

2. A metallic shingle having the hollow ribs E along the inclined edges of the lower end of the shingle, and the curved hollow ribs *e e*, substantially as shown and described.

3. Metallic shingles, substantially such as described, provided with the ribs E E along their inclined edges, and the ribs F extending inward and upward from a point near the obtuse corners of the shingles, substantially as and for the purposes set forth.

HENRY W. SHEPARD.

Witnesses:
EDWD. PAYSON,
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R. J. 5-0 words.