(No Model.)

# A. A. SMYTH.

## METALLIC SHINGLE.

No. 453,707 Patented June 9, 1891.

Fig. 1.

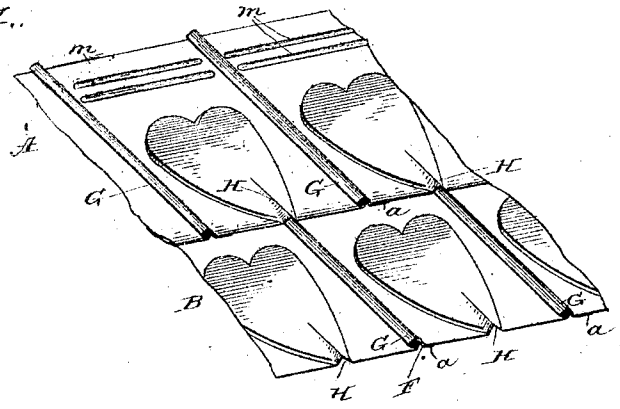



Fig. 2.




Fig. 3.

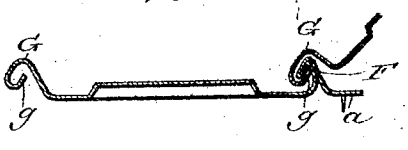
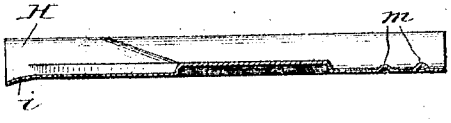



Fig. 4.




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# UNITED STATES PATENT OFFICE.

ADOLPHUS A. SMYTH, OF NASHVILLE, TENNESSEE.

## METALLIC SHINGLE.

SPECIFICATION forming part of Letters Patent No. 453,707, dated June 9, 1891.

Application filed October 7, 1890. Serial No. 367,360. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLPHUS A. SMYTH, of Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Metallic Shingles; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to improvements in shingles or roofing-plates such as are formed of sheet metal and applied to the roof individually, and has for its object to provide a shingle or roof-plate which may be manufactured at a very small cost and which may be applied by unskilled labor and without the use of special mechanical devices.

The invention consists in certain novel details of construction, to be hereinafter described, and pointed out particularly in the claim at the end of this specification.

Referring to the accompanying drawings, Figure 1 is a perspective view of a section of roof formed of shingles constructed in accordance with my invention. Fig. 2 is a sectional view through two of the shingles, showing the joint. Fig. 3 is a similar view showing the manner of applying the shingles Fig. 4 is a section at right angles to the one in Figs. 2 and 3.

Like letters of reference indicate the same parts in all the figures.

The letters A B represent, respectively, the shingles constituting the different horizontal rows, the joints of which rows, it will be particularly observed, alternate—that is to say, the joints in one horizontal row are located at the centers of the shingles of adjacent rows.

Each shingle in the present case is formed with a nailing-strip *a* on one side, of any preferred or desired width, immediately adjacent which is the longitudinal V-shaped rib F, formed by a fold in the body of the shingle, with the apex upward, the edge of the fold being bent downward to give this effect. On the opposite edge of the shingle is formed a similar V-shaped rib G, which is somewhat less angular—that is to say, the angle formed by the sides is wider than that formed by the sides of the rib F, for a purpose to presently appear, and the extreme edge of the shingle is turned up, as at *g*, forming an angular hook end adapted to engage the edge of the V-shaped rib F, as shown in Figs. 2 and 3.

The angle of the rib F is, as just mentioned, slightly sharper than that of the rib G, by which construction it will be seen that the shingles will fit together easily and without sticking should any slight irregularities or indentations occur in the ribs.

The preferred manner of fitting the shingles together is shown in Fig. 3, the overlapping one being elevated slightly at the outer edge as it is pushed along into place. Then when it is pressed down into contact with the sheathing-boards the hook end *g* is caused to bind tightly within the V-shaped rib F, and the top of said rib F presses against the inside of the rib G, as shown clearly in said Fig. 3.

Between the two ribs F and G the body of the shingle is formed into any desired ornamental figure by the stamping or embossing process, such figure, however, preferably terminating in an upwardly-extending inverted-V-shaped extension H, within and beneath which the ribs of the next lower row of shingles fit, and in order to prevent any rain or snow from driving up under the shingles their lower edges are turned down, as at *i*, and near the top are formed two or more ribs *m m*, which lie beneath the lower edges of the next higher row.

By breaking joints between the shingles, as described, they may be applied similar to the ordinary wood shingles, and the nails and fastening means are fully protected from the weather, an additional security against the weather being obtained by causing the corners or edges of the ribs to bind together at two or more points, so as to form tight joints along the sides of the shingles.

Having thus described my invention, what I claim as new is—

The herein-described shingle or roofing-plate formed of sheet metal, having the nailing-strip, the inverted-V-shaped rib or projec-

tion F, formed by a fold of the metal adjacent said nailing-strip, and a corresponding V-shaped rib or projection G on the opposite edge of the shingle, the angle formed by the sides of which is of greater width than that of the rib or projection F, said rib or projection G being provided with an angular hook end *g*, whereby the ribs are caused to bind when slipped together and straightened out on the sheathing-boards, substantially as described.

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Witnesses:
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