(No Model.)

J. W. ABRAHAMS.

SHEET METAL ROOFING.

No. 403,899. Patented May 28, 1889.

Fig. 1.

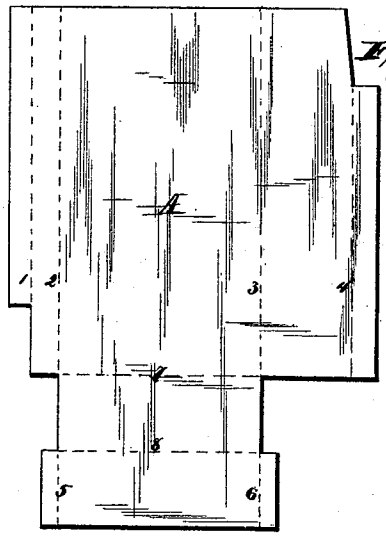


Fig. 2.

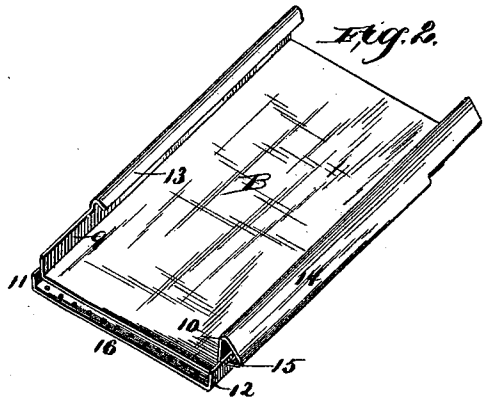


Fig. 3.

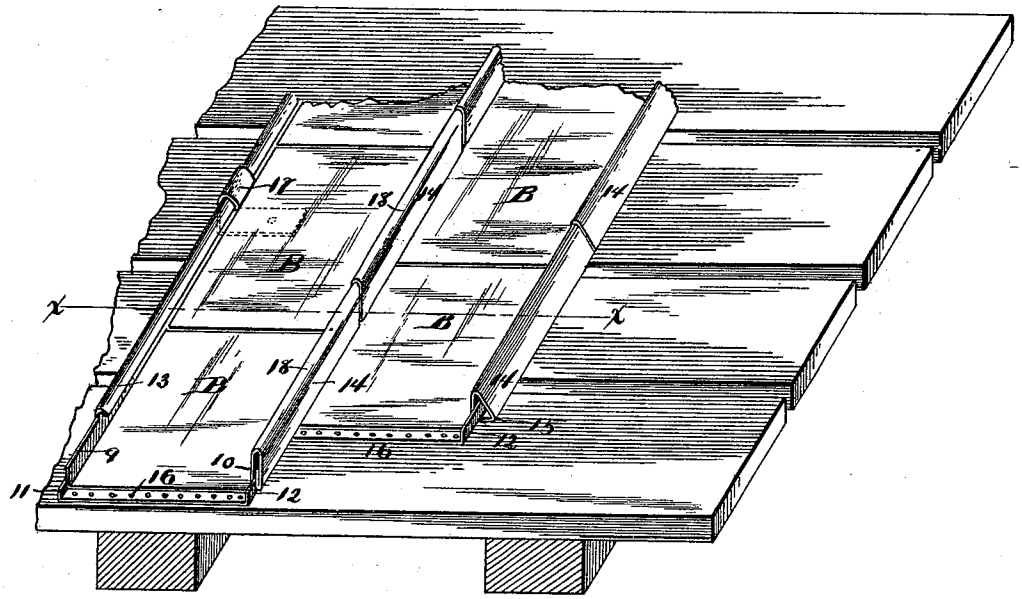
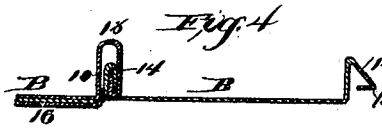


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN WM. ABRAHAMS, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO JOHN DAVIS, OF SAME PLACE.

SHEET-METAL ROOFING.

SPECIFICATION forming part of Letters Patent No. 403,899, dated May 28, 1889.

Application filed February 1, 1889. Serial No. 298,316. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAM ABRAHAMS, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sheet-Metal Roofing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sheet-metal roofing, and has for its object an improved construction of the plates or sections.

The invention will be hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a plan view of a blank for forming my improved sheet or section; Fig. 2, a perspective of a section formed from the blank; Fig. 3, a similar view showing the application of the sections to a roof, and Fig. 4 a cross-section on the line *x x* in Fig. 3.

Reference being had to the drawings and the letters thereon, A indicates a blank which is folded on the lines 1, 2, 3, 4, 5, 6, 7, and 8 and forms standing seams, which are composed of the vertical flanges 9, 10, 11, and 12 and the angular flanges 13, 14, and 15, and a rabbet or seat, 16, through which nails are driven to secure the section to the sheathing of a roof or sides of a building.

By bending the blank on the lines indicated a section, B, is formed of one continuous piece of metal, thus avoiding the necessity of soldering joints, and presenting a surface through which no water can possibly leak. The sections are prepared in the form shown in Fig. 2, with the flanges 13, 14, and 15 bent at an angle to a perpendicular line to cause them to engage readily in uniting them on a building.

The fold on the lines 7 8, which form the rabbet or seat 16 with the vertical flanges 11 12, renders it impossible for water to back up or to be driven under the sections by high winds, while the nails driven through the seat 16 are completely covered by the adjacent sections below it.

As an additional security to the section, cleats or strips of tin 17 are secured to the sheathing and bent into the seams. The section B having been put in position, by interlocking the flanges on their sides they are bent upon each other by a suitable implement to form standing seams 18 without the use of solder.

Having thus fully described my invention, what I claim is—

1. A blank for forming a section of metallic roofing adapted to be folded on the lines 1 2 3 4 5 6 7 8, substantially as described.

2. A section of metallic roofing having vertical and angular flanges on its sides and a rabbet or seat at one end below the plane of the body of the section, substantially as described.

3. A section of metallic roofing having flanges 9 10 11 12 13 14 15, and a rabbet or seat, 16, formed by a double fold and integral with the sections, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN WM. ABRAHAMS.

Witnesses:

JOHN R. MURPHY,

JOHN GLENN.