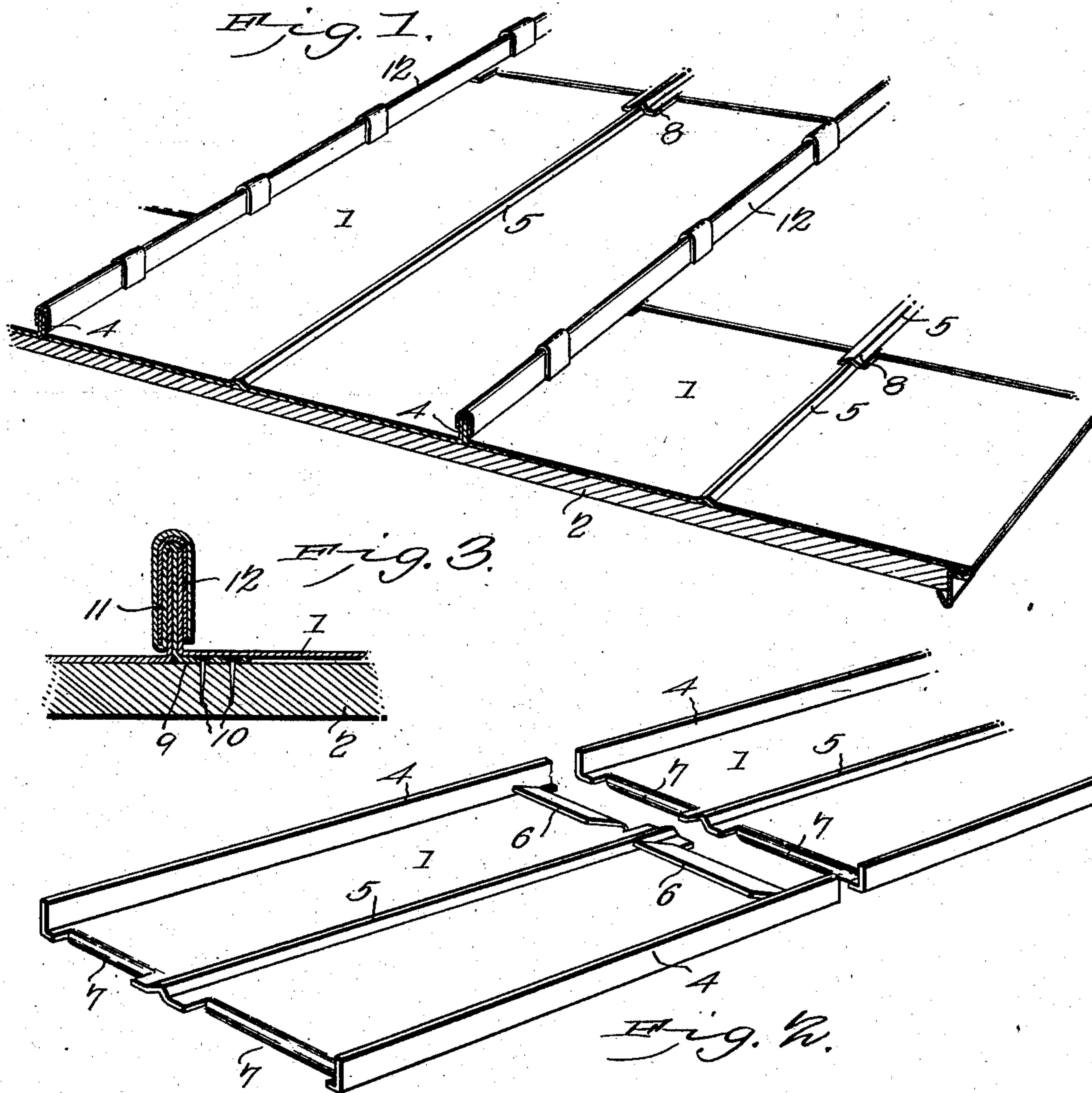


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PATENTED FEB. 10, 1903.

G. HUTH.
METALLIC ROOFING.
APPLICATION FILED APR. 28, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORG HUTH, OF DELTA, OHIO.

METALLIC ROOFING.

SPECIFICATION forming part of Letters Patent No. 720,030, dated February 10, 1903.

Application filed April 28, 1902. Serial No. 105,076. (No model.)

To all whom it may concern:

Be it known that I, GEORG HUTH, a citizen of the United States, residing at Delta, in the county of Fulton and State of Ohio, have invented a new and useful Metallic Roofing, of which the following is a specification.

This invention relates to metallic roofing.

The object of the invention is in a ready, simple, inexpensive, and thoroughly practical manner to obviate danger of the roofing being torn off from heavy wind-storms, to obviate the employment of solder in assembling the sections, thereby lessening the cost of the roof and rendering the employment of a skilled tinner or roofer unnecessary, to render the roof proof against being damaged from variations in temperature, causing unequal expansion and contraction, and, finally, to improve the construction of the roof as a whole.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a metallic roofing, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof.

In the drawings, Figure 1 is a view in perspective showing the manner of associating a metallic roof with the roof-boards. Fig. 2 is a view in perspective of two sections of roofing disconnected to exhibit the manner in which they are connected. Fig. 3 is a view in transverse section taken through two sections of roofing, showing the manner in which the cap or saddle is held associated with the upstanding flanges of the roof-sections.

Referring to the drawings, 1 designates the metallic roof-section, and 2 the roof-boarding to which it is secured.

The metallic roofing which constitutes the gist of the present invention and is shown in detail in Fig. 2 consists of tin or other suit-

able metal provided with the usual side flanges 4 and intermediate of its width with an upstanding angular ridge or rib 5, which operates to stiffen and reinforce the sheet of metal, as will presently appear. At each end of the sheet there are provided two hooks 6 and 7, respectively, each the counterpart of the other except that the hooks 6 in this instance are bent over toward the top of the sheet and the hooks 7 bent under toward the under side of the sheet. These tongues are formed by splitting the metal adjacent to the flange and ridge and then bending them in the manner described. The flanges and the portion of the plate carrying the ridge will thus project beyond the tongues and will overlap when the sections are assembled, as shown at 8 in Fig. 1. The sheets of metal are prepared in the manner described in the shop or factory and when thus furnished may be laid upon the roof by a person of ordinary mechanical ability.

As stated at the beginning of the specification, one object of this invention is to obviate the employment of solder in assembling the sections with the roof-boarding, and this is effected by interlocking the downturned hooks 7 of one section with the upturned hooks 6 of the other section and then hammering or pressing down the hooks, thus to assemble the sections in a secure manner, the intermediate ridge serving not only as a means for reinforcing the sheet, but also to permit of the requisite expansion due to heat and cold, the strain thereby being centered at the intermediate portions of the sheets instead of at the flanges, as usual. In roofing a building with this form of roof one sheet of the roofing will be laid adjacent to the comb of the roof and another sheet is interlocked therewith in the manner described, and so on until the roofing extends from the comb to the eaves, at which points they may be secured in any preferred manner, preferably by bending the end of the sheet adjacent to the eaves thereunder and securing it, as by nailing, and by interlocking two sheets of the metal at the comb in the manner described. Before a second line of sheets is started anchors 9 are disposed adjacent to the flanges of the secured sheets and are held in place by nails 10, as shown in Fig. 3. The

next line of sheets is then positioned as the first line with their flanges against the upstanding portion of the anchors, after which the anchors are bent over one of the flanges, as shown at 11, after which a cap or saddle 12 is placed over the flanges and may be clenched or clamped thereagainst, and the anchors are then bent over the caps, as shown in Figs. 1 and 3, thereby securely locking the caps in place. It will be seen that the only nails that are employed in connection with this form of roofing are those that hold the anchors in place, so that should it at any time be desired to remove the roof to place it upon another building all that is necessary will be to turn back the anchors from engagement with the caps, remove the caps, and then detach the roof in sections or in sheets, as preferred. It is to be understood that the meeting ends of two caps will be spanned by the anchors, thereby to preclude leakage at these points. When the roofing has been secured upon the roof in the manner described, it will be absolutely anchored against movement under action of heavy winds, the anchors at the flanges and the intermediate ridges serving effectively to prevent any wave motion to the roofing.

As is well known, the soldering of the seams of a roof amounts to about one-third of the total cost, so that by obviating this it will be seen that the cost of placing the roofing will be proportionately reduced.

While the form of roofing herein shown and the manner in which its sections are assembled will be found thoroughly efficient in use, it is to be understood that the invention is not to be limited to the precise arrangement shown, as slight changes may be resorted to without departing from the scope of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A metallic roof-section provided at its ends with locking means, at its sides with upstanding flanges, and intermediate of its width with a reinforcing-ridge disposed parallel with the flanges, the flange and ridge portions at the ends of the sections projecting beyond the locking means.

2. A metallic roof-section provided at its ends with oppositely-disposed locking means, at its sides with upstanding flanges, and intermediate of its width with a reinforcing-ridge disposed parallel with the flanges, the flange and ridge portions at the ends of the sections projecting beyond the locking means.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORG HUTH.

Witnesses:

F. W. ZERMAN,
GEORGE T. BELL.