J. W. REYNOLDS.

METALLIC ROOF COVERING.

APPLICATION FILED AUG. 19, 1909.

946,686.

Patented Jan. 18, 1910.

2 SHEETS—SHEET 1.

Fig. 2.

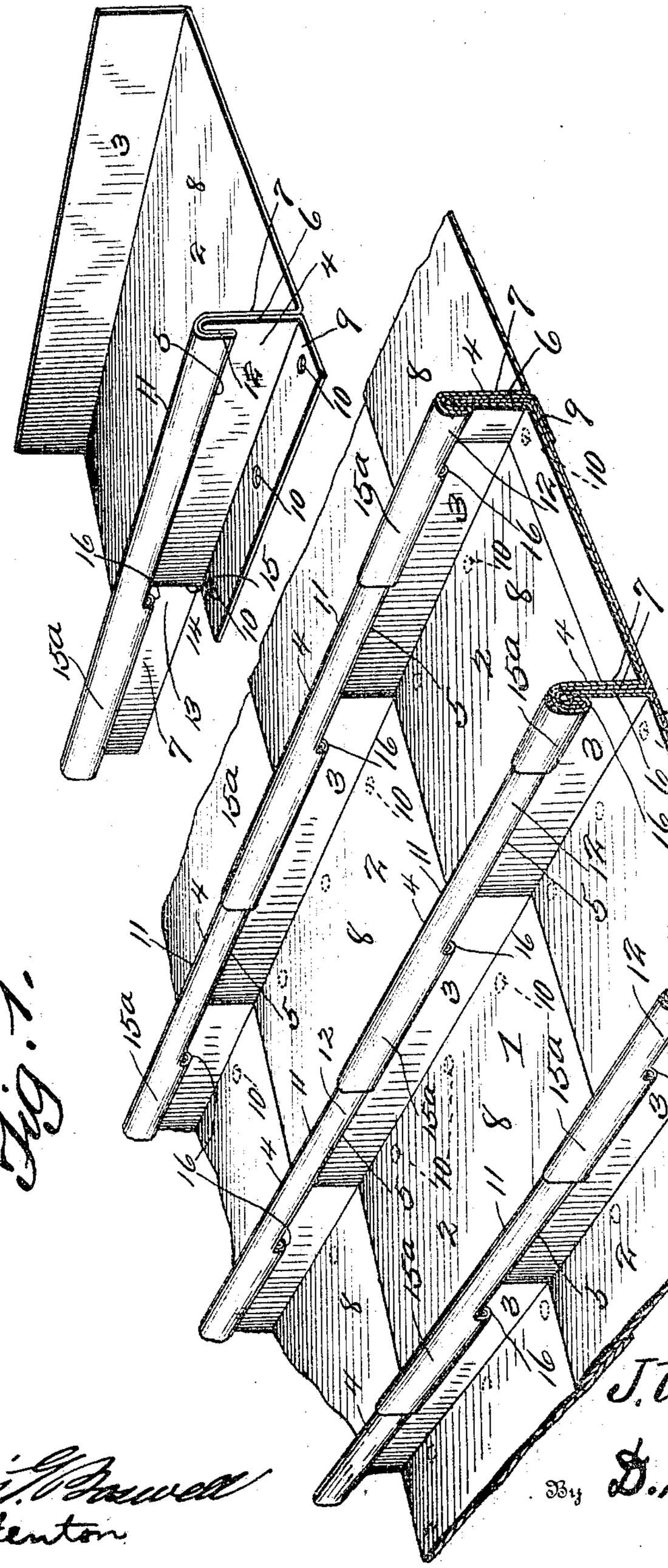

Fig. 1.

Witnesses

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Fig. 3.

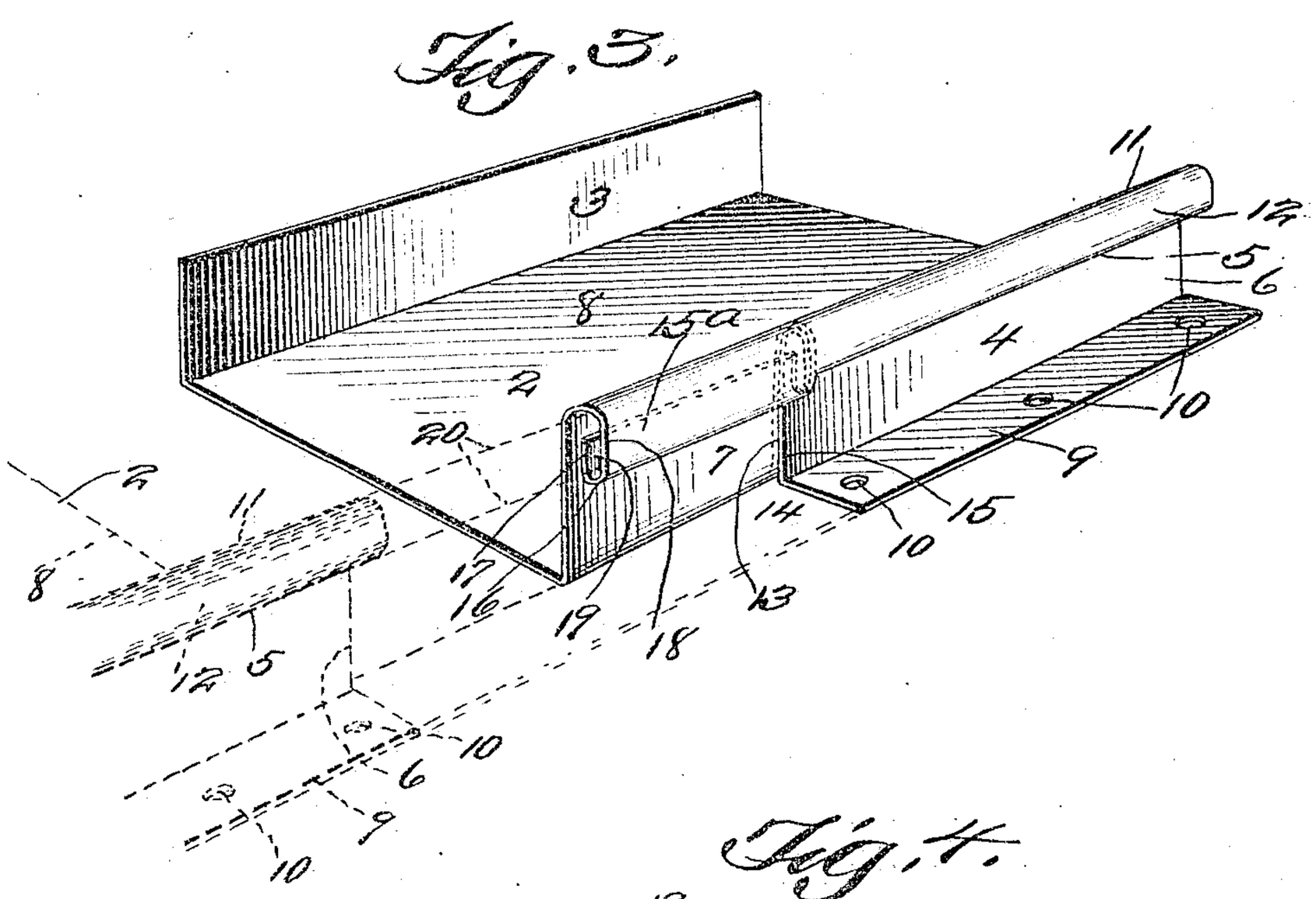

Fig. 4.

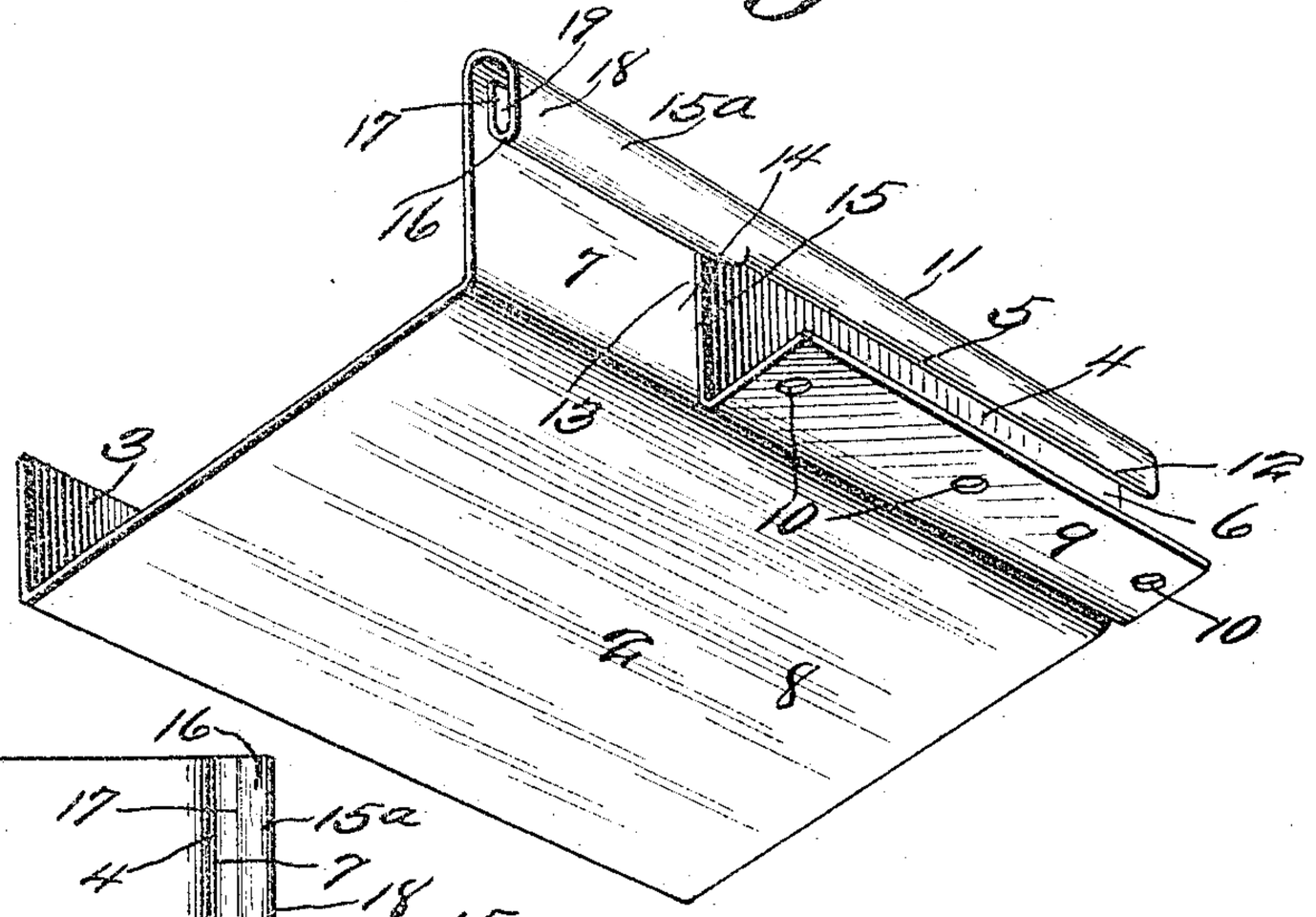

Fig. 5.

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UNITED STATES PATENT OFFICE.

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METALLIC ROOF-COVERING.

946,686. Specification of Letters Patent. Patented Jan. 18, 1910.

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To all whom it may concern:

Be it known that I, JOHN W. REYNOLDS, a citizen of the United States, residing at Erin, in the county of Houston and State of Tennessee, have invented a new and useful Metallic Roof-Covering; 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.

The invention about to be set forth and claimed, belongs to the art of building construction, and particularly pertains to a new and useful roof covering; and the object of the invention, is to simplify such a structure, and, render it more serviceable, during severe weather.

Another object of the invention, is to provide a structure of this design, comprising a plurality of metal sections having interengaging raised portions, whereby they may be secured together in series, in order to prevent the roofing from being torn from the building, by severe wind storms and the like.

This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein,

Figure 1 is a perspective view of a roof covering composed of a plurality of metallic sections, joined together in such wise as to break joints. Fig. 2 is a detail perspective view of one of the sections looking toward one end thereof. Fig. 3 is a perspective view looking at the opposite end. Fig. 4 is a similar view to Fig. 3 looking slightly under the section. Fig. 5 is a bottom plan view of a portion of one of the sections.

Referring to the annexed illustrations 1 designates a roof covering made up by a plurality of metallic sections 2. Each section upon one of its longitudinal edges is provided with an upturned flange 3 of a single thickness, while the portion 4 of the section is bent upon itself as at 5, as clearly shown. The portions 6 and 7 are disposed at right angles to the body portion 8 of the section, as shown clearly in Figs. 2, 3, and 4, and are brought closely together so as to engage one another, while the portion 6 is provided with a flange 9, which extends at right angles thereto and in a plane with the body portion 8, as clearly shown. In arranging the sections to form the roof covering the flanges 9 of the sections are secured to the roof skeleton by means of sprigs or similar devices (not shown), which are adapted to penetrate the apertures 10 of the said flanges 9 as will be clearly manifest. The portions 6 and 7 are turned upon themselves as at 11 in order to form the flange 12, which is directed downward and disposed parallel with the bodies of the portions 6 and 7, as clearly shown in Fig. 2. The flanges 12 of the various sections are spaced a slight distance apart from the body portions of the parts 6 and 7, in order to receive the single flanges of the adjacent side sections of the roofing, as clearly shown in Fig. 1. The portion 6 of each section is cut away as at 13 to form the recess 14, thereby forming the shoulder 15, against which the end of the adjacent end section engages, as will be understood by referring to Fig. 3 of the drawings.

A single thickness of the flange 12 at the end 15 thereof is turned upon itself as at 16, to form the flange 17, which is disposed parallel with the portion 7 of the section, as clearly shown in Fig. 3. The said flange 17 of each section is disposed approximately in the middle of the portion 18 of the flange 12 and the portion 7. By arranging the flange 17 in this manner a space 19 between the flange 17 and the portion 18 is formed, in which the flange 12 of the adjacent end section is inserted, as will be clearly evident when examining Fig. 3 of the drawings. This flange 17 only extends a slight distance of the flange 12, as shown in dotted lines in Fig. 3, and, by the employment of said flange, upward displacement of the sections is prevented, during severe windstorms.

In arranging the various sections in series to form the covering as shown in Fig. 1, it is necessary to begin at one side of the roof skeleton, the single flanges of the various sections being disposed adjacent to the side of the roof skeleton, after which the flanges 9 are secured to the rafters of the skeleton. If it be understood that the section shown in Fig. 3 is the first section laid and the portion of a section shown in dotted lines is the

next section to be laid, the flange 12 thereof is inserted in the space 19, as shown by the connecting dotted lines 20, in Fig. 3. When sliding the various sections in place, after the first one has been laid, the body portion of each section is inserted under the body portion of the adjacent section, as will be understood upon referring to Fig. 1. After the first line of sections are laid, the single flanges of the next line of sections are slid behind the flanges 12 of the first line of sections, that is, after the flanges 9 are secured to the rafter of the roof skeleton (not shown).

From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be clearly manifest.

Having thus fully described the invention, what is claimed as new and useful is:—

1. A metal roofing comprising a plurality of sections having their longitudinal edge portions provided with upturned flanges of single and double thicknesses, said flanges of double thicknesses having portions turned downwardly upon themselves to partially lap over the single upturned flanges of the adjacent side sections, said downwardly turned portions having portions of one of their thicknesses curved upwardly upon themselves so as to lap under the downwardly turned portions of double thicknesses of the adjacent end sections to prevent upward displacement.

2. A metal roofing comprising a plurality of sections having their longitudinal edge portions provided with upturned flanges of single and double thicknesses, said flanges of double thicknesses having portions turned downwardly upon themselves to partially lap over the single upturned flanges of the adjacent side sections, said flanges of double thicknesses having recessed portions to receive the flanges of double thicknesses of the adjacent end sections and provided with shoulders to limit the inter-engagement of the sections, said downwardly turned portions adjacent to the recessed portions having flanges curved upon themselves and directed upwardly so as to lap under the downwardly turned portions of double thicknesses of the adjacent end sections to prevent upward displacement.

3. A metal roof section having a body portion provided upon one side thereof with a flange of double thickness, said flange having its upper portion turned over and directed downwardly and spaced apart from the body of the flange, said downwardly directed portion having an upwardly extending flange at one end thereof and disposed centrally of the first named flange and the said downwardly directed portion, as and for the purpose specified.

4. A metal roof section having a body portion provided upon one side thereof with a flange of double thickness, said flange having its upper portion turned over and directed downwardly and spaced apart from the body of the flange, said downwardly directed portion having an upwardly extending flange at one end thereof and disposed centrally of the first named flange and the said downwardly directed portion, said section having a recessed portion and provided with a shoulder, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. REYNOLDS.

Witnesses:
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G. T. BUCHANAN.