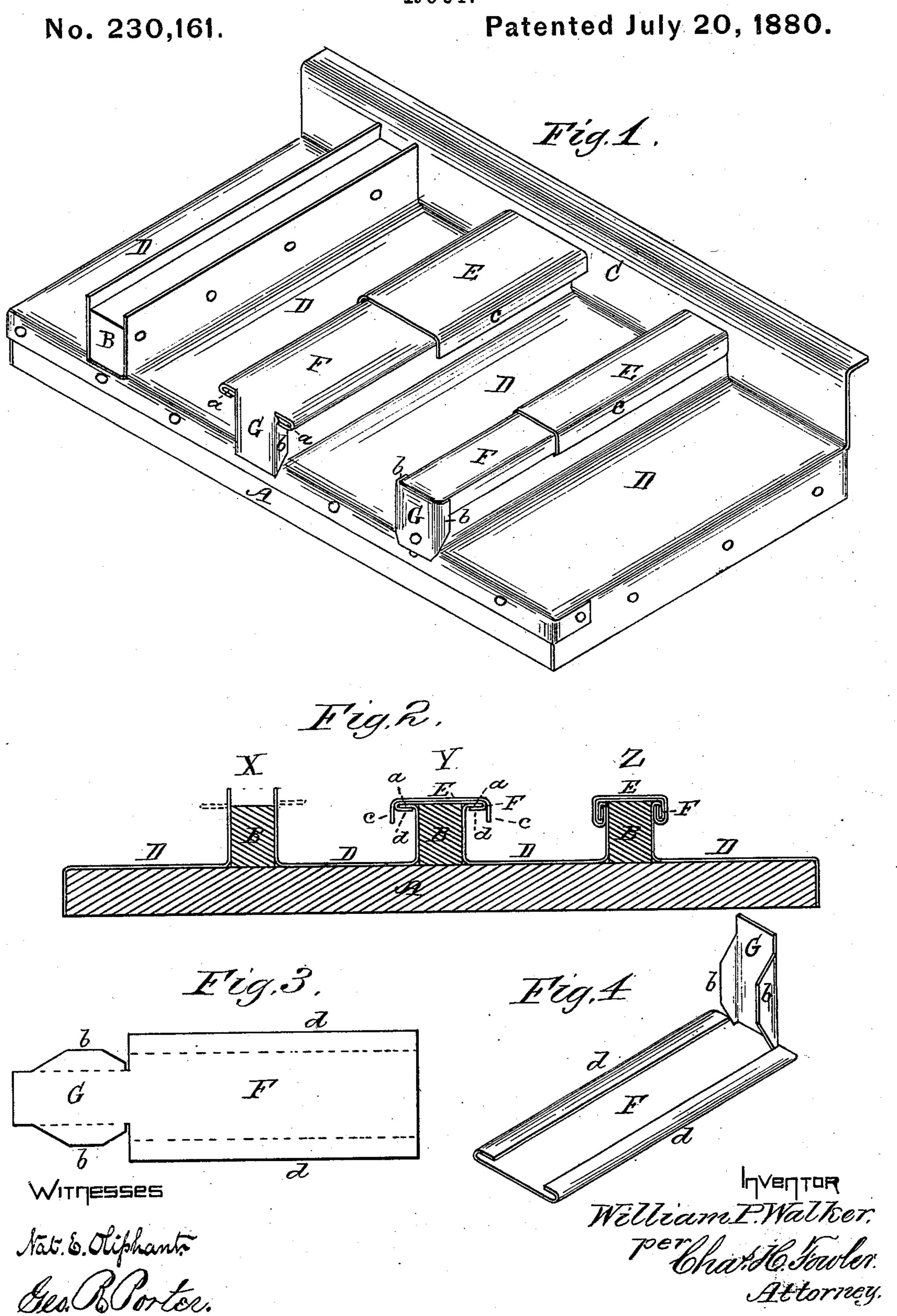
W. P. WALKER.
Roof.



UNITED STATES PATENT OFFICE.

WILLIAM P. WALKER, OF MACON, MISSOURI.

ROOF.

SPECIFICATION forming part of Letters Patent No. 230,161, dated July 20, 1880.

Application filed May 28, 1880. (No model.).

To all whom it may concern:

Be it known that I, WILLIAM P. WALKER, a citizen of the United States, residing at Macon, in the county of Macon and State of Missouri, have invented certain new and useful Improvements in Tin or Metal Roofing; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a plan view of the sheet-metal blank from which the end cap is formed, and Fig 4 is a perspective view of the cap bent into form ready for securing in place upon the roof.

This invention has relation to certain new and useful improvements in sheet-metal roofing; and the object thereof is to so cover the roof with sheet metal as to render it perfectly wind and water tight, and at the same time render the roofing firm and lasting, so that there will be no danger of the metal sheeting working loose and rattling, caused by the wind getting under it.

The invention consists in the peculiar manner of laying and securing the metal sheets and manner of constructing the end caps which are placed over the strips of wood, as shown in the drawings and hereinafter described.

In the accompanying drawings, A represents a section of a roof, to which are secured the wooden strips B, a strip of sheet metal, C, 35 being first laid upon the roof and turned up so as to come in between the mortar and brick. of the wall when there is one upon the roof, the purpose being to prevent leaks. The wooden strips are then secured to the roof, be-40 ginning with the first one, the metal plate D at the left of the strip being turned up against the side thereof and secured by nailing, the metal plate at the right of the strip being similarly secured in place and to the wooden strip, 45 as shown at X, Fig. 2. The wooden strips and sheet-metal plates are thus connected to the roof and together throughout the width of said roof, after which flanged caps E F are slipped over the flanges a of the plates D, and after-50 ward bent down against the sides of the wooden

strips, as shown, respectively, in Y Z, Fig. 2, the rear ends of the plates D and caps E being secured by solder to the sheet-metal strip C, which prevents wind or dampness from getting in and rusting the sheet metal. Where these wooden strips B are used it is essential, to successfully complete the roofing and preserve the strips from the dampness, to have them thoroughly covered and protected at their ends. This I accomplish by forming the caps F with an apron, G, having ears or flaps b, said cap with its apron and flaps being stamped in the form shown in Fig. 3, after which it is bent in the form shown in Fig. 4.

After the caps E F have been secured in 65 place upon the top of the wooden strips B the aprons G of the caps F are nicely fitted around the ends of said strips and nailed thereto, the flaps b being pressed or hammered against the sides of the wooden strips and soldered to the 70 plates D, thus forming a perfect and durable shield for the ends of the wooden strips.

The caps E are formed with single flanges c, while the caps F have double flanges d, these flanges being formed by suitable machinery 75 ready to be applied to the roof.

The plates D being secured to the roof and to the wooden strips, as illustrated at X, Fig. 2, the edges are turned out at right angles, as shown in dotted lines, after which the some E are placed over them and next the caps F.

The advantage of having the caps F formed with the double flanges d is that they can be slid along over the flanges of the plates D, and are securely held in place thereon while they are being bent down, as shown at Z, Fig. 2, and the aprons G secured by soldering to the plates, the caps F being completed by suitable machinery, ready to be applied to the roof, as 90 shown in Fig. 4 of the drawings.

The manner of laying the sheet-metal plates to the roof and to the wooden strips, in connection with the flanged caps, makes a very strong and durable roofing—one that will not 95 easily become injured by heat or cold or by severe storms, and as the metal plates and caps are firmly connected together there is no danger of the plates or caps working loose; and a very essential feature of my invention is the 10

manner of shielding and protecting the ends of the wooden string from the dampness which | formed with double flanges d, aprons G, and the dampness which | flans b, the plates and cans being connected J I claim as new, and desire to secure by Let. In a metallic roofing having the wooden / strips B, the plates D, connected to the roof and / to the strips, and having their edges turned down at right angles, in combination with the caps E, formed with flanges c, and the caps <math>F,

Haps b, the plates and caps being connected / together and to the wooden strips, as specified, and for the purpose set forth. In testimony that I claim the above I have hereunto subscribed my name in the presence

WILLIAM P. WALKER. D. A. PATTON, $E_{MMETT\ THOMPSON.}$