(No Model.)

B. F. CALDWELL.

CAP AND ANCHOR FOR METALLIC ROOFING.

No. 318,352. Patented May 19, 1885.

Fig. 1.

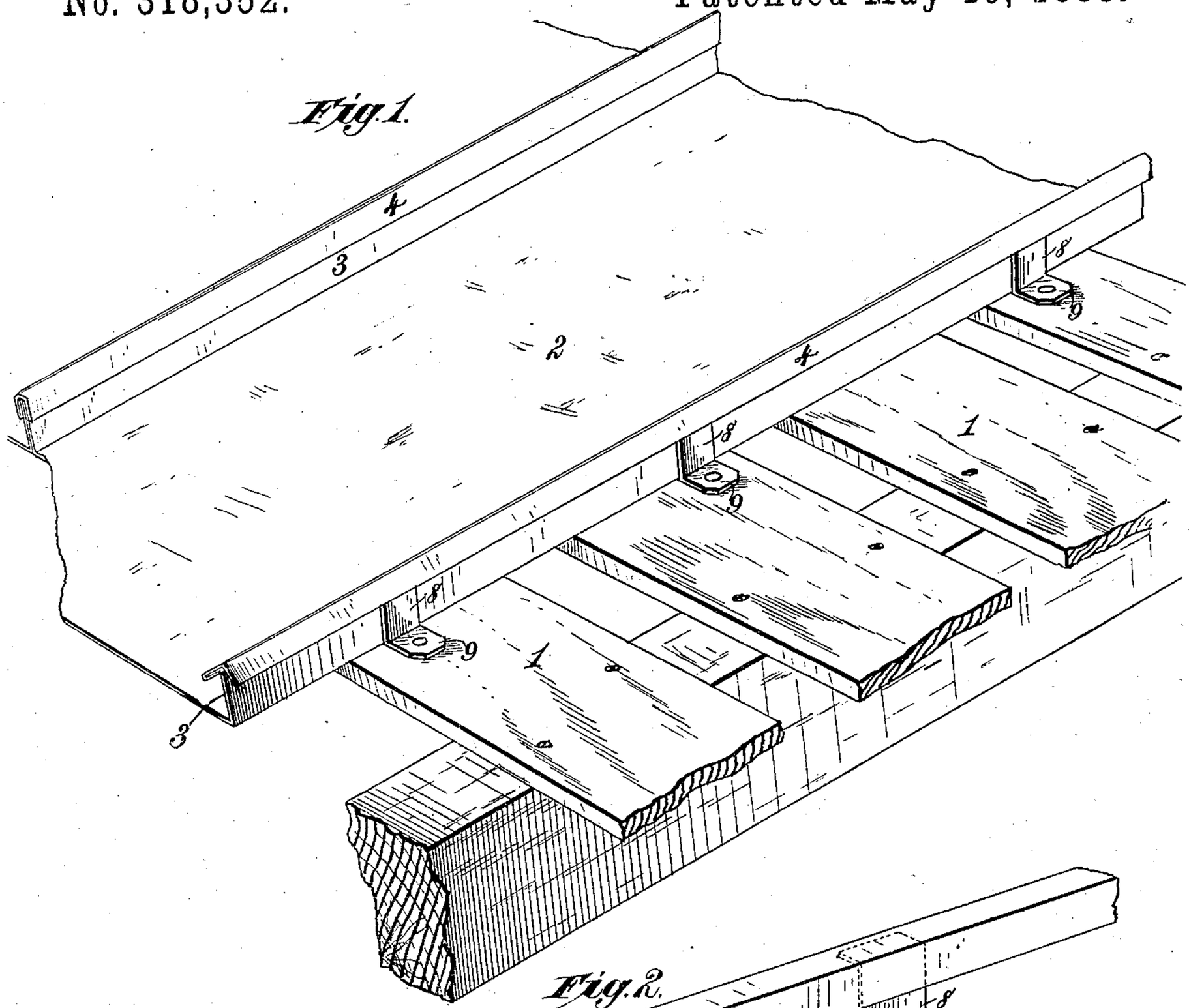


Fig. 2.

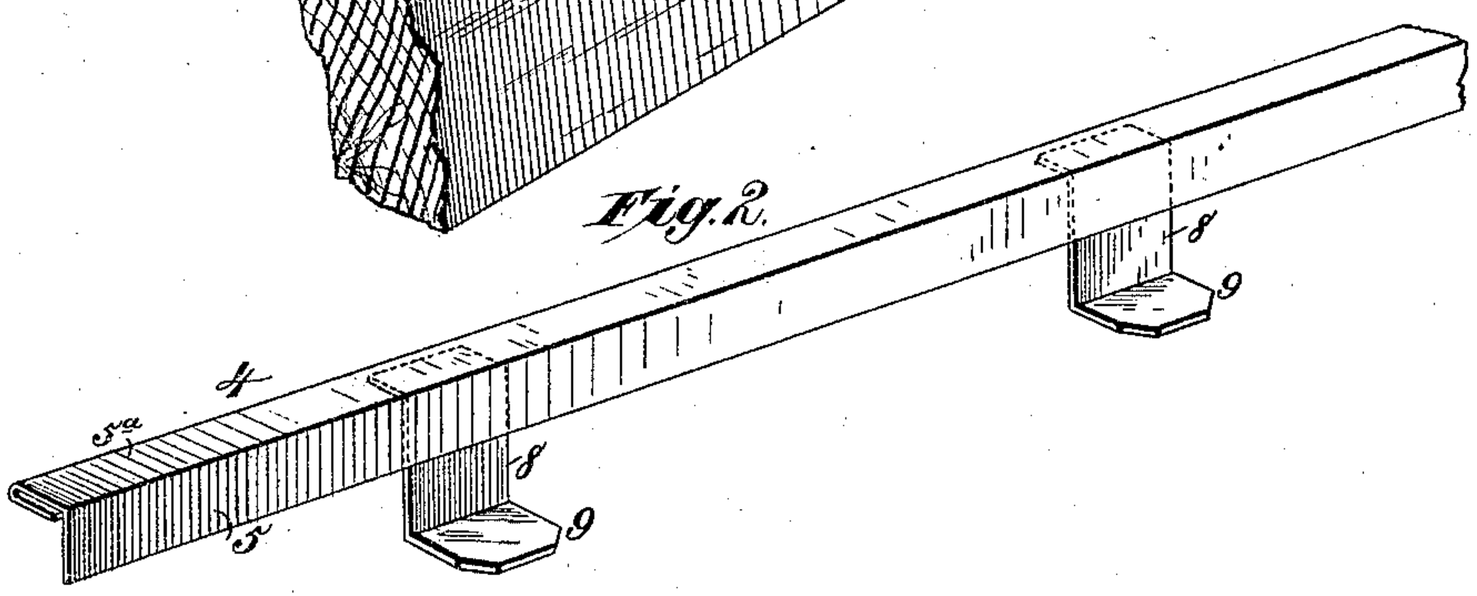


Fig. 3.

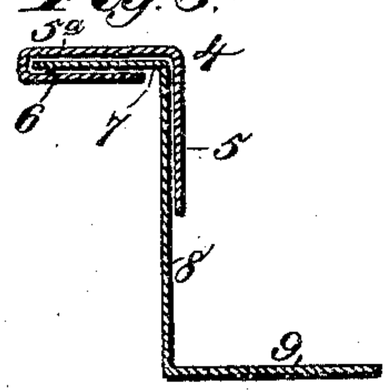


Fig. 4.

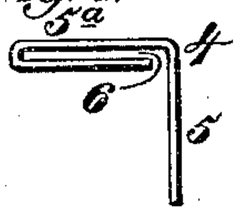
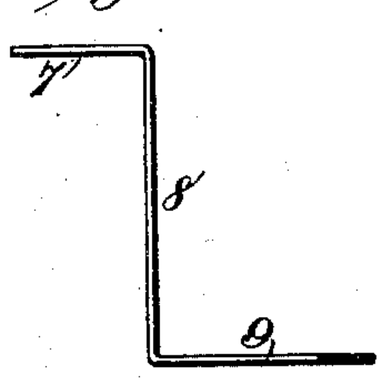


Fig. 5.



Witnesses.
Robert Everett.
J. A. Rutherford

Inventor.
Benjamin F. Caldwell.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

BENJAMIN F. CALDWELL, OF WHEELING, WEST VIRGINIA.

CAP AND ANCHOR FOR METALLIC ROOFING

SPECIFICATION forming part of Letters Patent No. 318,352, dated May 19, 1885.

Application filed March 10, 1885. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. CALDWELL, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Caps and Anchors for Metallic Roofing, of which the following is a specification.

This invention relates to improvements in what are known as "caps" and "anchors" for metallic roofing, which devices, as ordinarily constructed, are composed of an angular sheet-metal cap having secured to its flanges the right and left turned flanges of an anchor, having a foot-piece for attaching it to the timber of the roof in such manner, that the upturned flanges of the metal sheets are clasped and held in position to constitute metallic roofing. These caps and anchors, where furnished as an article to the trade, are ordinarily connected in a permanent manner by rivets—that is, the right and left turned flanges have been riveted, respectively, to the opposite flanges of the angular cap, and consequently the anchors cannot be adjusted along the length of the cap in order to bring them into proper position to be attached to the separated rafters, laths, or boards comprising the roof of the building. In many instances metallic roofing is applied to buildings wherein the roof structure is composed of laths, boards, or planks arranged parallel and separated at equal or different distances apart, on which the metal sheets are laid, the caps, with their anchors, extending transversely to the separated rafters, laths, boards, or planks. In consequence of this, when the caps are adjusted in proper position relative to the upturned flanges of the metal sheets, the anchors of the caps frequently come between the separated laths, boards, or planks, and cannot therefore be attached thereto, thus rendering a large number of the anchors useless in constructing the roof.

The object of my invention is to adjustably connect the anchors and the angular caps in a novel manner, so that when the caps are properly placed in relation to the metal sheets, if any of the anchors come between the separated laths, planks, or boards, such anchor or anchors can be adjusted along the length of the cap until brought into proper position over the lath or plank for its secure attachment thereto.

The object of my invention I accomplish in the manner and by the means hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of portion of the structure of a roof with my invention applied thereto to secure and attach the metal sheets; Fig. 2, a perspective view of one of the caps and its adjustably-attached anchors; Fig. 3, an enlarged cross-sectional view taken through one of the anchors; Fig. 4, a detached end view of the cap, and Fig. 5 a detached elevation of one of the anchors.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where the numbers 1 indicate the parallel separated laths, planks, or boards comprising a part of the structure of a roof, and 2 the metal sheets having upturned flanges 3 along their edges to be clasped and held by the cap and anchor in a manner well understood, and therefore requiring no further explanation.

The cap-strip 4 is angular in cross-section to form two opposite flanges, 5 and 5^a, standing approximately at right angles to each other, the longitudinal edge of the flange 5^a being turned inward beneath and parallel to such flange to constitute the groove or guideway 6, which extends by preference from end to end of the cap-strip. The anchor is bent at one end into angular form corresponding to the angular inner side of the cap, the inner end of the anchor being formed as an engaging-arm, 7, which loosely rests within the groove 6 of the cap, while the other arm, 8, of the anchor bears squarely against the opposite flange, 5, of the cap, which acts as a bearing for the anchor, when the latter is moved along the length of the cap. The arm 7 of the anchor, by loosely engaging the groove 6 of the cap, is not only securely connected with the latter, but is movable lengthwise thereof, so that any or all of the anchors can be adjusted to any desired position between the ends of the cap. Thus, where the cap and anchors are to be used in attaching metal sheets upon a roof structure comprising separated laths, planks, or boards 1, if any anchor should come in the space between the laths or boards, such anchor or anchors can be slid along the length of the cap until brought into proper position over the lath or planks for

attachment thereto. By this means every anchor is made to perform its legitimate function, which cannot be accomplished if the anchor and cap were riveted or otherwise rigidly attached together.

The caps may be rapidly and economically manufactured by taking a strip of metal of the requisite length and width and turning one longitudinal edge over upon itself to form the guide-groove 6, after which the strip can be struck up, bent, or otherwise brought to its angular form to constitute the opposite flanges, 5 5ª. The anchors can be made by taking a strip of metal and bending one end to form the foot 9, by which it is attached to the timber of the roof structure, the opposite end of the strip being bent to form the arm 7 for engaging the groove of the cap. A simple method for accomplishing this end is to slip the anchors into engagement with the cap from the open end of the latter, the extreme ends of the inwardly-turned part of the cap being then pressed against the flange to prevent accidental displacement of the anchors from the groove.

Having thus described my invention, what I claim is—

1. The combination of the cap angular in cross-section to form two flanges approximately at right angles to each other, and one of the flanges having its edge turned inward to form a longitudinal guide-groove, with the anchor, having one end angularly bent to form two arms, one engaging the guide-groove and the other bearing against the opposite flange of the cap, said anchor being adjustable along the length of the cap, substantially as described.

2. The combination of the angular cap comprising two flanges standing approximately at right angles to each other, and one flange having its longitudinal edge turned inward, with the anchor, having one end bent into an angle the apex of which fits the angle of the cap, and constituting two arms, one engaging the inward-turned flange and the other bearing against the opposite flange of the cap from the angle of the latter to its outer edge, substantially as described.

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

B. F. CALDWELL.

Witnesses:
J. A. RUTHERFORD,
ALBERT H. NORRIS.