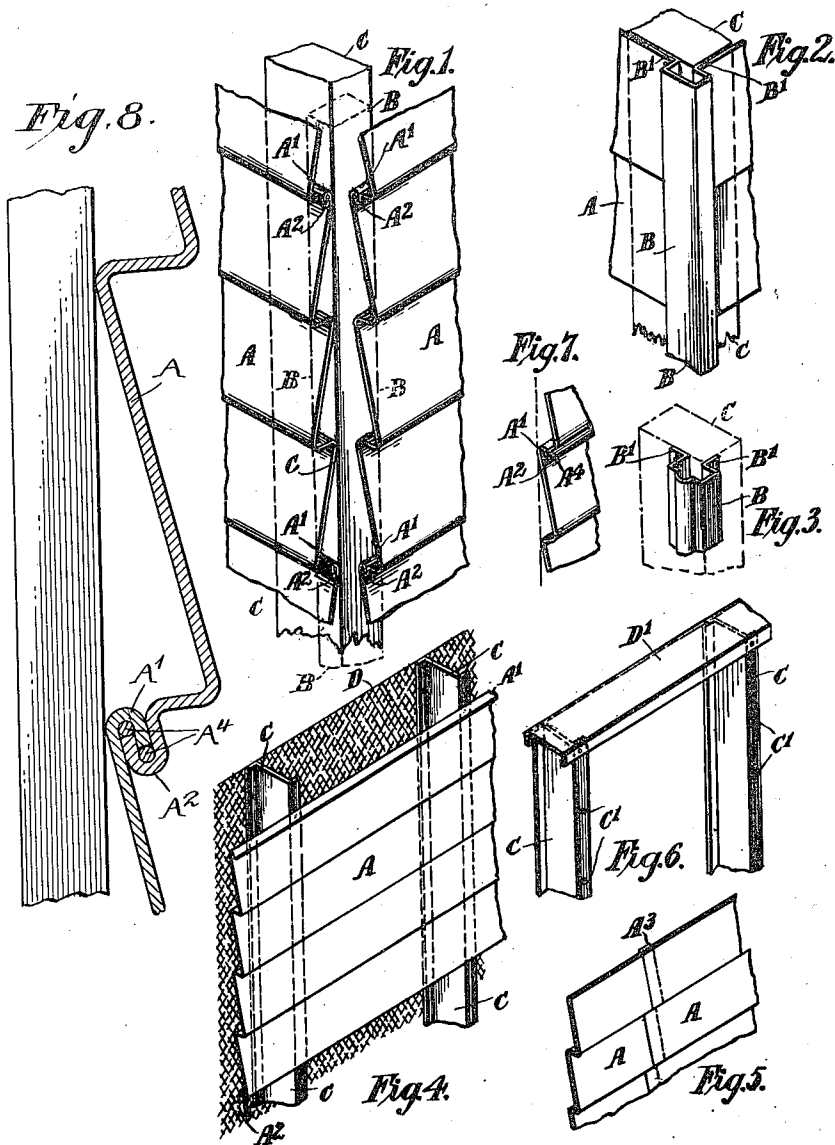


A. A. MILLER.
SHEET IRON FOR BUILDING PURPOSES.
APPLICATION FILED MAY 22, 1914.

1,176,080.

Patented Mar. 21, 1916.



WITNESSES
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ANDREW AUGUSTINE MILLER, OF VICTORIA, AUSTRALIA.

SHEET-IRON FOR BUILDING PURPOSES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ANDREW AUGUSTINE MILLER, a citizen of the Commonwealth of Australia, residing at Victoria, in the Commonwealth of Australia, have invented an Improved Sheet-Iron for Building Purposes, of which the following is a specification.

This invention relates to an improved construction of sheet iron and more especially galvanized sheet iron for use more particularly for wall building purposes to take the place of weatherboards.

The object of this invention is to provide an improved construction of sheet iron, usable more especially for the external walls of buildings and the like, which will be more sightly than the corrugated iron as at present used, and which will have the appearance of weather boards, and having the strength and rigidity of fluted iron and the same ease and facility in erection, while further steel or iron studs, plates and the like can be employed for building purposes, thereby rendering such building fire proof. I accomplish this object, by constructing the sheet iron by rolling, or otherwise of step-shape in cross section, in order to have a similar appearance to a number of weather boards, each sheet having its top edge crimped forward and its bottom edge crimped backward, (or vice versa) for effecting a joint between the sheets, while one end of each sheet is bent or stepped back to accommodate the overlapping edge of the adjoining sheet.

The invention will now be more fully described, aided by a reference to the accompanying sheet of drawing, in which:—

Figure 1 is a perspective view showing the sheet iron construction according to this invention, and secured to a wooden corner stud or post of a building. Fig. 2 is a similar view to Fig. 1, but shows the sheet iron secured in position in conjunction with a metal stop or corner piece. Fig. 3 shows an alternative design of metal stop, which may be employed with this invention. Fig. 4 shows the sheet iron attached to metal studs, adapted to be used in place of the ordinary wooden studs now employed. Fig. 5 shows the means devised for overlapping the edges of the sheets of iron, in order to produce a flush surface. Fig. 6 is a detail view of portion of a building constructed entirely of metal. Fig. 7 shows strengthening wires inserted in the crimped edges of the metal

sheets. Fig. 8 is an enlarged detail sectional view of the sheathing.

According to this invention a sheet of galvanized iron or the like A is constructed of step shape in cross section either by rolling, stamping or otherwise, in order that the face of the said sheet will have the appearance of a number of weather boards, the top edge A' of each sheet being crimped or bent forward forming a downwardly projecting flange and the bottom edge A² crimped or bent backward forming an upwardly projecting flange as shown in Fig. 1, in order to effect a water and dust tight joint between the top and bottom edges of the sheets. This arrangement may if desired be reversed. Further, one end of each sheet is set back the desired distance as shown at A³ Fig. 5 in order to accommodate the overlapping edge of the adjoining sheet and form a flush face. In erection this sheet iron is arranged horizontally as shown so that the appearance of weather boards is effected. The crimped portion A' of one sheet is adapted to engage the crimped portion A² of the next sheet and the securing nails, which are preferably flat headed are driven through the joint providing a secure and weather and dust proof joint. If desired to increase the strength a wire A⁴ may be inserted within the crimped edges of each sheet as shown in Fig. 7. This construction of sheet iron A may be used in conjunction with wooden corner stops B, (as shown in dotted lines in Fig. 1) or with metal corner stops B (as shown in Figs. 2 and 3). This metal stop B is formed with metal flanges B', which are overlapped by the sheet iron A, and may be secured in position by a nail or other fastening.

As shown in Fig. 4 the said sheets A may be secured to metal studs C, constructed preferably of Z shape in cross section and having perforations C' at equal distances apart, in order that the sheets A can be secured in position by screw bolts or rivets. These metal studs C enable suitable expanded metal or wire netting D, to be secured to the inside portion of the same, to carry the plaster in ordinary manner, thereby providing a fire proof building. In conjunction with the metal studs metal wall plates D' may also be employed.

By the use of this construction of sheet iron, the appearance of weather boards may be attained with a great reduction of cost

in painting and with the strength and rigidity of galvanized iron and the ease and facility afforded by the latter in erection. Walls formed in this way also lend themselves to packing with mineral wool, sawdust, or other insulating material. This construction of sheet iron enables a building to be constructed throughout of iron, thereby rendering the same fireproof and at the same time enables buildings to be erected in sections for convenience of transportation.

I claim—

1. Sheet iron for building purposes, comprising an elongated sheet of iron crimped to represent weather board strips of substantially Z-shape in cross-section, the top of said sheet bent forwardly upon itself to form a longitudinal hooked portion, the space between the said bent-forward portion and the body portion of the strip being substantially the same in width as the thickness of the sheet iron, the said bent forward portion being parallel with the body of the sheet iron, the bottom of the said sheet bent backwardly to form a longitudinal wall, said wall extending rearwardly for a portion of its width and terminating at its rear edge in an upwardly disposed longitudinal groove, said groove being the width of the thickness of the said sheet iron, said longitudinal hooked portion adapted to snugly engage the said longitudinal groove of the next sheet above, and a reinforcing member

longitudinally arranged in the bottom of the said longitudinal groove. 35

2. Sheet iron for building purposes, comprising an elongated sheet of iron crimped to represent weather board strips of substantially Z-shape in cross-section, the top of said sheet bent forwardly upon itself to form a longitudinal hooked portion, the space between the said bent-forward portion and the body portion of the strip being substantially the same in width as the thickness of the sheet iron, the said bent forward portion being parallel with the body of the sheet iron, the bottom of the said sheet bent backwardly to form a longitudinal wall, said wall extending rearwardly for a portion of its width and terminating at its rear edge in an upwardly disposed longitudinal groove, said groove being the width of the thickness of the said sheet iron, said longitudinal hooked portion adapted to snugly engage the said longitudinal groove of the next sheet above, and reinforcing members longitudinally arranged in the bottom of the said longitudinal groove and within the said longitudinal hooked portion. 40 45 50 55

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses. 60

ANDREW AUGUSTINE MILLER.

Witnesses:

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G. R. CULLEN.