A. K. PRUDEN.

METAL BUILDING CONSTRUCTION.

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1,198,764.

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Fig. 1.

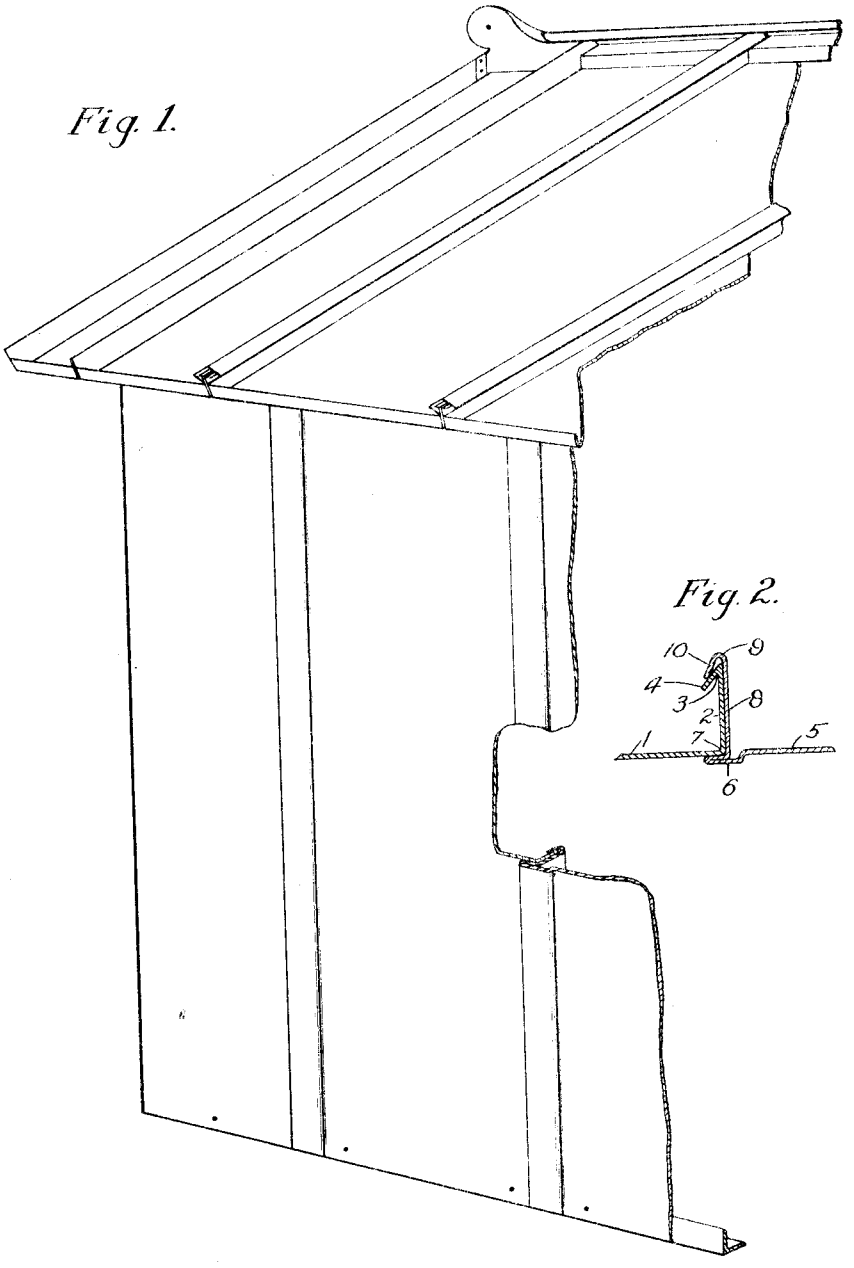


Fig. 2.

Witness

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UNITED STATES PATENT OFFICE.

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METAL BUILDING CONSTRUCTION.

1,198,764. Specification of Letters Patent. Patented Sept. 19, 1916.

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To all whom it may concern:

Be it known that I, ALLAN K. PRUDEN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Metal Building Construction.

My invention relates to improvements in the construction of metal buildings or shelters and more particularly to a method of forming the edges of the metal used in the side walls and roof of the building, so as to form substantial studding from the metal itself.

The object of my invention is to form studding from the metal that will strengthen and reinforce the building and at the same time serve to make a close and substantially tight joint between two adjacent sheets of metal.

The drawing discloses part of a side wall and roof of a metal building in which my improved form of metal studding is used in the side wall.

The appearance of the improved studding is shown in general in Figure 1, and Fig. 2 is a horizontal section of one of the improved forms of studs and a part of two sheets of metal connected thereby.

In Fig. 2, I show part of a metal sheet 1 bent at right angles to form the flange 2, which in turn is bent back at an acute angle at 3, leaving the projection 4 at the extreme edge of the sheet. The other edge of the same sheet would be formed as is the sheet 5, which shows a fold at 6 to receive the angle 7 of sheet 1 and which also has a flange 8 formed with a sharp bend at 9, leaving a projection 10 at the extreme edge. The length of the projections 4 and 10 and the angles they form with flanges 2 and 8 respectively, are such that the extreme edge of the projection 10 bears strongly on the projection 8, giving a tension that tends to keep the angle 7 of sheet 1 pressed tightly against the interior angle at 6 of the part 5.

It is evident from the drawing that the relation of parts may be such that sheet number 1 as formed may be slipped into the flange 8 of sheet number 5 and form a substantially tight joint between 6 and 7 due to the pressure exerted on 4 by the tension of the part 10.

The construction as shown may also be used in joining sections of a roof or other surfaces and while in this specification and drawing, I have shown one particular method of forming the studding, it is evident my invention may be applied in other manners and I do not wish to be understood as confining myself to the application or arrangement of parts as described except as the scope of the invention is limited in the following claims:

Having described my invention, what I claim as new and desire to protect by Letters Patent, is:

1. A sheet metal wall structure comprising in combination with a pair of wall plates, flanges projecting from each of two adjacent plates at a right angle in the same direction from the plane of said plates, said flanges being bent over at their free ends to form flange extensions under an acute angle and one of the plates being provided with a plane extension at the foot of the pertaining flange, the flange and angular extension of one plate being nested between the two extensions of the other plate and the flange extension on the inner member inclined to the flange at a greater angle than that of the outer member, whereby the members are securely interlocked.

2. A sheet metal wall structure comprising in combination with a pair of wall plates, flanges projecting from each of two adjacent plates at a right angle in the same direction from the plane of said plates, said flanges being bent over at their free ends to form flange extensions under an acute angle and one of the plates being provided with a plane extension at the foot of the pertaining flange parallel to the plane of the pertaining wall plate, the flange and angular extension of one plate being nested between the two extensions of the other plate and the flange extension on the inner member inclined to the flange at a greater angle than that of the outer member, whereby the members are securely interlocked.

ALLAN K. PRUDEN.