

June 12, 1928.

1,672,914

G. F. SCHMITT  
BUILDING CONSTRUCTION

Filed July 20, 1926

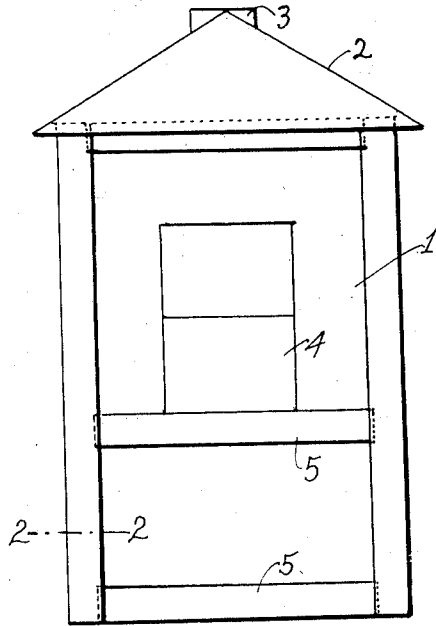


Fig. 1.

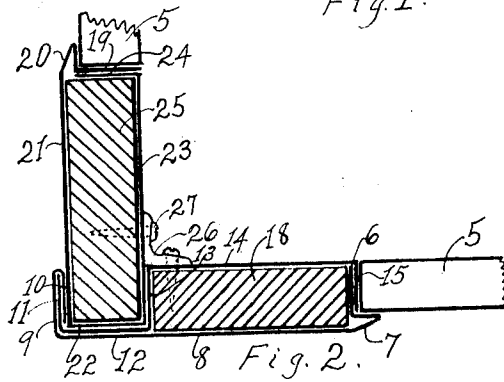


Fig. 2.

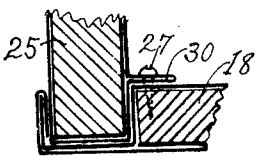


Fig. 3.

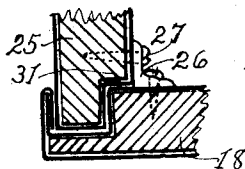


Fig. 4.

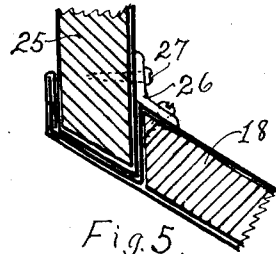


Fig. 5.

George F. Schmitt, Inventor

By his Attorneys  
Clifford & Scull

## UNITED STATES PATENT OFFICE.

GEORGE F. SCHMITT, OF WEST ORANGE, NEW JERSEY, ASSIGNOR TO METAL PRODUCTS AND ENGINEERING CORPORATION, OF WEST ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## BUILDING CONSTRUCTION.

Application filed July 20, 1926. Serial No. 123,605.

This invention relates to a building construction that can be cheaply manufactured and can be readily assembled and disassembled, without necessitating the use of any special tools for this purpose. The invention relates more particularly to the connection of the corners of the building construction in such a manner that ingress of water, sleet or snow is prevented, and cold air is also kept out. The invention is particularly applicable, for example, to the construction of traffic or policemen's booths that require to be moved occasionally from place to place, although the invention is not restricted to this particular use.

The invention will be understood from the description in connection with the accompanying drawings, in which Fig. 1 is a side elevation of the device; Fig. 2 is a section on an enlarged scale along the line 2-2 of Fig. 1 and Figs. 3, 4 and 5 are similar sections showing modifications. In the drawings, reference character 1 indicates the side of a policeman's booth that is provided with a roof or cover 2, having a ventilator 3 at the top thereof. One or more of the sides of the booth may be provided with windows, as indicated at 4, and one side may be provided with a door in the usual manner. The corner strips are connected by cross-pieces 5, and the remainder of the wall may be made up of paneling of the well-known sort, and attached in any convenient manner.

The corner pieces are made up of structures comprising sheet metal bent into appropriate shapes, and enclose a stiffening strip, or the like, such as wood, for example. Sheet metal is bent to form a straight part 6, a ledge 7, a straight part 8, a portion 9 bent at right-angles to the portion 8, and a bent back portion as indicated at 10. Another piece of sheet metal is bent to form a straight portion 11, extending between the portions 9 and 10, a portion 12 at right-angles to the portion 11, a portion 13 at right-angles to the portion 12 and extending in the same direction to form a space or groove, a straight portion 14 and a portion 15 extending at right-angles to the portion 14 and lying adjacent the portion 6. The sheet metal pieces may be formed or bent into the shape indicated in any convenient manner, and, if desired, the pieces may be

riveted or welded in spots to keep the same in relative position. A strip 18 of stiffening material, such as wood, for example, may be inserted in the space between the portions 8 and 14.

Another corner piece comprises a piece of sheet metal bent to form a straight portion 19, a ledge 20 similar to the ledge 7, a straight portion 21, a portion 22 bent at right-angles to the portion 21, a portion 23 bent at right-angles to the portion 22 and a portion 24 bent at right-angles to the portion 23, and extending adjacent the portion 19, thus forming a sheet metal strip of approximately rectangular shape in cross-section that may enclose a stiffening member, such as the strip of wood 25. The thickness of the corner piece just described is such that it will fit closely in the notch or groove in the other corner piece between the portions 10 and 13. The two corner pieces are retained in position relative to each other by means of the bracket 26 that is fastened to the respective corner pieces by means of the screws 27. The sheet metal pieces may be bent along arcs of small circles so that no sharp corners remain exposed to view.

In the modification shown in Fig. 3, the corner pieces may be formed as above described, except that the sheet metal is bent outwardly and folded back on the second corner piece as indicated at 30, thus providing a rib through which a screw 27 may be inserted and pass into the wood piece 18 to keep the corner pieces in assembled relation.

In the modification shown in Fig. 4, corner pieces are similar to those already described, except that the groove in one is made narrower and the edge of the other is recessed, as shown at 31, thus forming a shoulder that contacts with the inside face of the first corner piece.

In the modifications thus far described, the corner pieces are so formed that the corners make right-angles to form structures of four sides. It will be obvious that the sheet metal can be so bent that angles of different sizes can be formed at the corners, thereby making the structure of any desired number of sides. In Fig. 5 is shown an illustration in which the corner pieces are so bent as to adapt the same for use in making a hexagonal structure. The man-

ner in which the corner pieces of Fig. 2 are modified for this purpose will be obvious from Fig. 5, without requiring any detailed explanation.

5 It will be clear that a joint with metal fitting against metal along three sides of the paths is produced by this invention, so that leakage through the joints is effectively prevented. The sheet metal of the first corner  
10 piece can be so bent that the groove must be sprung open slightly to receive the edge of the other corner piece, thus providing a close fitting joint when the corner pieces are in place.

15 It will be understood that each wall of the structure is made up with its edges terminating in the corner pieces as above described, so that each wall can be shipped as a whole, and they can be easily and readily  
20 assembled with the aid of no other tool than a screw-driver.

Since the door, window or roof of this device constitute no portion of the invention and can be made of conventional form, it  
25 is not thought necessary to describe the same.

I claim:

1. In a building construction, members for forming the corners thereof, one of said members having a longitudinal groove along  
30 the same with the bottom of said groove between the planes of the sides of said member, the edge of the other member being adapted to fit in said groove.

2. In a building construction, members for forming the corners thereof, one of said members having a longitudinal groove along  
35 the same, the edge of the other member being adapted to fit in said groove, the other edges of said members having ledges for fastening cross-pieces thereto.  
40

3. In a building construction, members for

forming the corners thereof, one of said members having a longitudinal groove along the same with the bottom of said groove between the planes of the sides of said member, the edge of the other member being adapted to fit in said groove, said members having sheet metal on the outside thereof. 45

4. In a building construction, members for forming the corners thereof, one of said members having a longitudinal groove along the same with the bottom of said groove between the planes of the sides of said member, the edge of the other member being adapted to fit in said groove, said first named member comprising sheet metal bent to form said groove. 50 55

5. In a building construction, vertically disposed corner pieces, one of said corner pieces comprising a stiff member lined with sheet metal bent to form a longitudinal groove along said corner piece with the bottom of said groove between the planes of the sides of said member. 60

6. In an element for a building construction, sheet metal bent to form an open groove, and a hollow space to receive a stiffening member, the bottom of said groove being intermediate the edges of said stiffening member. 65 70

7. In an element for a building construction, two interfitting pieces of sheet metal one of which is bent to form a groove and the other one of which is bent to form a ledge. 75

8. In an element for a building construction, two interfitting pieces of sheet metal one of which is bent to form a groove and the other one of which is bent to form a ledge with a hollow space between said groove and ledge. 80

GEORGE F. SCHMITT.