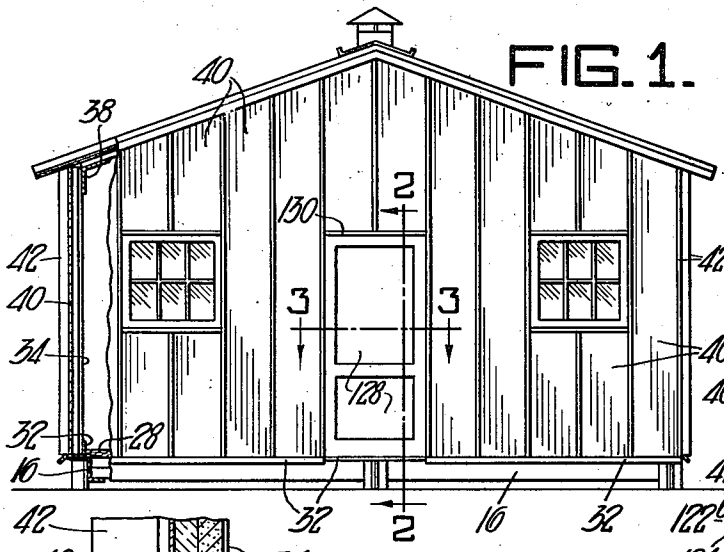
Aug. 29, 1944. C. I. AUTEN 2,356,730

PREFABRICATED METAL DOORWAY

Original Filed May 3, 1943

FIG. 1.



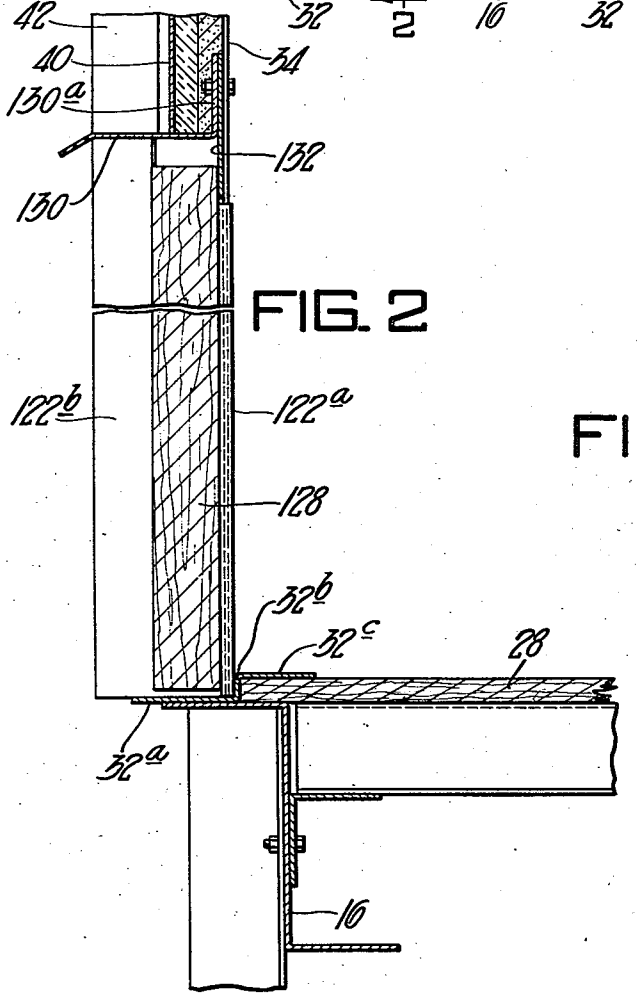


FIG. 2

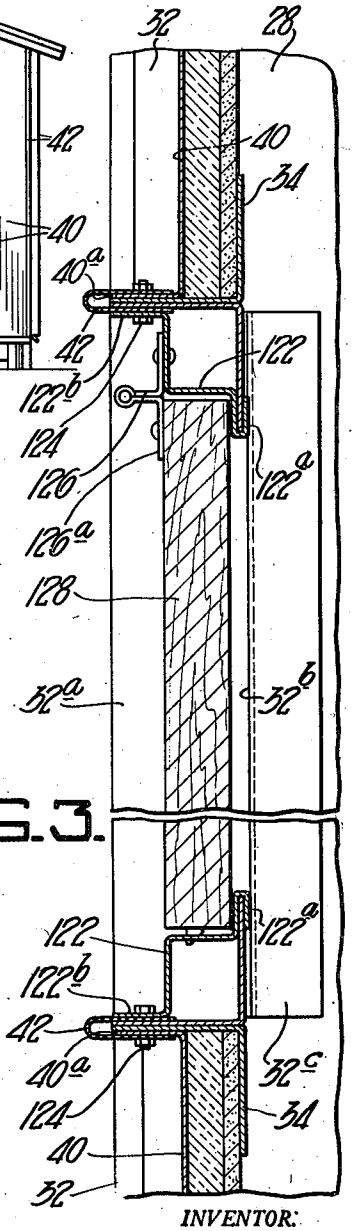


FIG. 3.

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PREFABRICATED METAL DOORWAY

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Original application May 3, 1943, Serial No. 485,486. Divided and this application May 11, 1943, Serial No. 486,572

3 Claims. (Cl. 189—46)

In a copending application, Serial No. 485,486, filed May 3, 1943, I have shown and described in detail a prefabricated house whose component parts are made of cold formed sheet metal elements by modern mass production methods. This application is a division of that copending application.

One object of the present invention is to provide metal door frame elements adapted to be secured to the metal uprights of a prefabricated house such as shown in the above identified application.

Another object is to provide overhead flashing and lower sill elements spanning the space between the uprights at the door opening.

A further object is to construct and arrange the various component parts hereinafter shown and described in detail so that they individually and jointly function in a manner hereinafter set forth.

An additional object is to provide an erected steel door frame to which is hung a door by the simple operation of the insertion of hinge bolts in the loops provided in the two leaves of the hinge.

For a more complete understanding of the invention, reference should be made to the following detailed description, the accompanying drawing, and the appended claims.

In the drawing:

Figure 1 is an end view of a prefabricated metal house with parts broken away to show parts of the improved door framing construction embodying the herein claimed invention.

Figure 2 is an enlarged vertical section on line 2—2 of Figure 1.

Figure 3 is an enlarged horizontal section on line 3—3 of Figure 1.

Referring particularly to the drawing, 16 represents a transversely extending sill of substantially Z-shape in cross section supported on a suitable foundation or on corner posts. Secured to the top flanges of the sill 16 is a transversely extending sill angle 32 to the upstanding flange of which a plurality of wall supporting uprights 34 are secured. These wall uprights consist of sheet metal angles arranged back to back and having their lower extremities secured to the upright flanges of the sill angle 32. At their upper extremities the uprights 34 are secured to an eaves member 38. This member serves as a lower support for inclined roof rafter members forming no part of the present invention and therefore not further referred to herein.

A plurality of sheet metal wall panels 40 having flanges 40a formed at their upright edges are interposed between adjacent pairs of the wall uprights 34. U-shaped sheet metal batten strips 42 embrace the adjacent flanges of the wall panels and uprights 34. Suitable fastening bolts penetrate the flanges so as to hold the parts in assembled relation.

The herein claimed invention relates to a specific type of door frame structure adapted to be seated between spaced pairs of the uprights such as shown at 34. In the building illustrated, the spacing on centers between two adjacent uprights and therefore the widths of each wall panel is approximately 20 inches. Where door opening is to be provided, the lower portion of one upright is cut away; thus the intervening space between adjacent wall uprights at a door location is approximately 40 inches. It is understood, of course, that the dimensions given are merely by way of illustration, and may be varied to suit special circumstances. At the boundary edges of the particular pair of uprights 34 between which a doorway is to be installed, I secure substantially Z-shaped door jambs, as hereinafter more fully described in detail. Spanning the door jambs at the top of the doorway I provide a head stop and a head flashing, these parts being secured in a manner hereinafter pointed out more fully. And at the base of the doorway the upstanding flange of the sill angle 32 is cut and bent downwardly so as to form a tread surface or as more fully hereinafter described in detail.

A typical doorway installation as illustrated is adapted to be made at any desired location. The door width is equal to that of two adjacent panels, and the main framing elements thereof are adapted to be secured to the adjacent wall upright supporting members 34. For example, as shown in Figure 3, at each side of each door location Z-shaped door jambs 122 are provided. These are formed with channel-shaped extensions 122a which overlap the adjacent flanges of upright members 34. The outer flanges 122b which are at right angles to the extensions 122, are adapted to be fitted against upright battens 42 which overlap the outwardly extended flanges of the uprights 34. The flanges 122b of the jambs are secured by bolts 124 which penetrate the battens and the flanges of the uprights 34, as shown. Suitable hinges 126 are secured to one of the jambs 122 and the mating portion 126a of the hinges screwed to the door 128.

Spanning the space between two adjacent uprights 34 at the top of the doorway is an angle-shaped head flashing 130 having an upright

flange 130[a] which is fitted against a head stop plate 132, this plating being interposed between the flange 130[a] of the head flashing and a flange of one of the uprights 34. At each doorway installation the sill angle 32 will be cut at parallel spaced points corresponding to the width of the doorway; thus the horizontal portion 32[a] of the sill angle will form a tread. The upright portion 32[b] will form a shoulder whose height is equal to the thickness of the plywood flooring 28. The portion 32[c] of the sill angle will be bent down flat over the top surface of the plywood flooring, thus providing a protective tread at the door entry way.

While I have described in considerable detail the specific embodiment of the invention herein illustrated which reduction to practice on a commercial scale has shown to be highly desirable, it is not to be construed that I am limited thereto, since changes in arrangement and substitutions of equivalents may be made by those skilled in the art without departure from the invention as defined in the appended claims.

I claim:

1. Prefabricated metal house construction, comprising upright wall supporting flanged members, sheet metal wall panels having flanges secured to said members, a pair of metal door jambs each bent to approximately Z-shape each having an extended channel portion in a plane parallel with said wall panels and clinched around a flange of a respective one of said members, another portion of each jamb at right angles to said extended portion being secured to another flange of said flanged member, a sill angle having an upstanding flange to which said upright wall members are secured, a portion of said upstanding sill flange being bent downwardly alongside said jambs and spanning the space between them to form a tread portion at the doorway defined by said jambs.

2. Prefabricated metal house construction, comprising upright wall supporting flanged members, sheet metal wall panels having flanges secured to said members, a pair of metal door jambs each bent to approximately Z-shape with an extended channel portion in a plane parallel with said wall panels and clinched around a flange of a respective one of said flanged members, another portion of each jamb at right angles to said extended portion being secured to another flange of said flanged member, a sill angle having an upstanding flange to which said upright wall flanged members are secured, the upstanding flange of said sill being cut adjacent each jamb and bent downwardly alongside said jambs and spanning the space between them to form a tread portion at the doorway defined by said jambs, and a head stop spanning the space at the top of said jambs and secured to said wall supporting angle members.

3. Prefabricated metal house construction, comprising upright wall supporting angle members, sheet metal wall panels having flanges secured to said members, a pair of metal door jambs each bent to approximately Z-shape with an extended channel portion in a plane parallel with said wall panels and clinched around one flange of a respective one of said angle members, another portion of each jamb at right angles to said extended portion being secured to the other flange of said angle member, a sill angle having an upstanding flange to which said upright wall angle members are secured, the upstanding flange of said sill being bent downwardly alongside said jambs and spanning the space between them to form a tread portion at the doorway defined by said jambs, and a head flashing of angular cross section spanning the space between and extending over the tops of said jambs and secured to said wall supporting angle members.

CLAUDE I. AUTEN.