

July 20, 1948.

E. J. MOLONEY
BUILDING CONSTRUCTION

2,445,491

Filed June 19, 1946

2 Sheets-Sheet 1

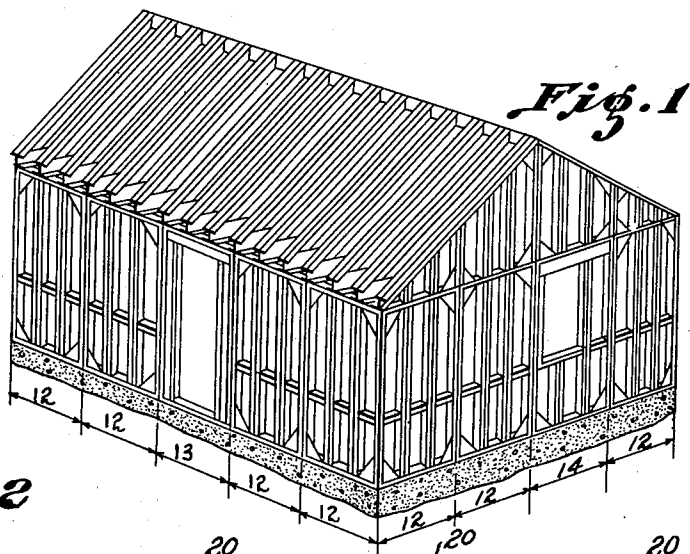


Fig. 2

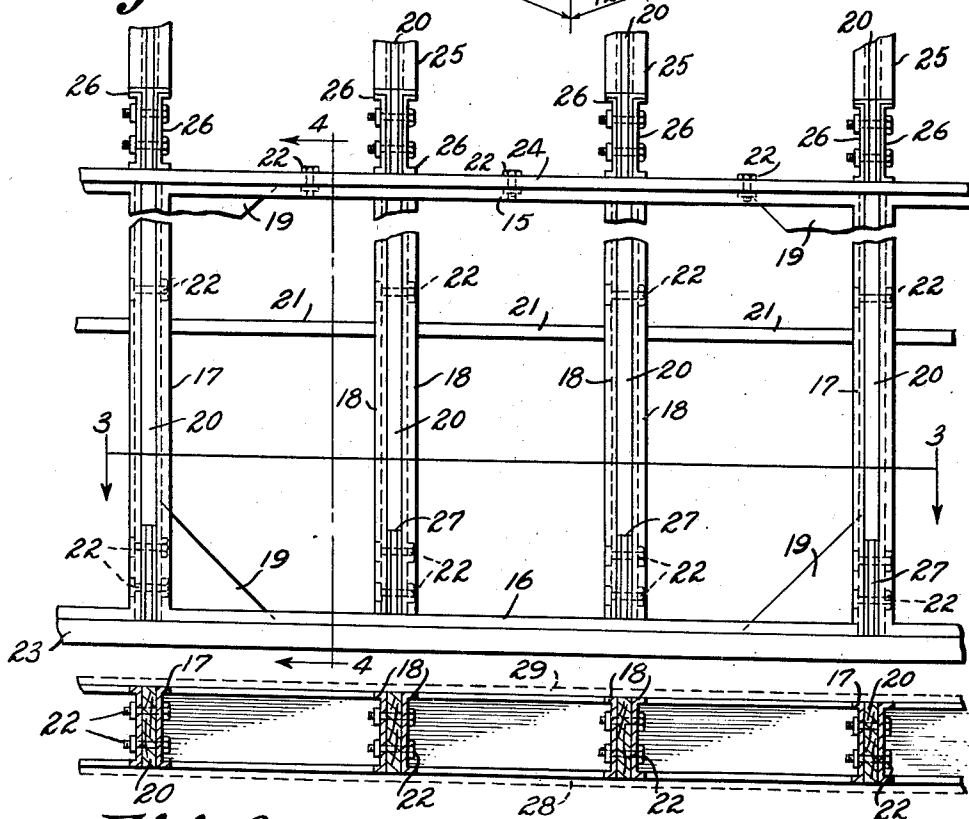


Fig. 3

Inventor:
Edgar John Moloney.

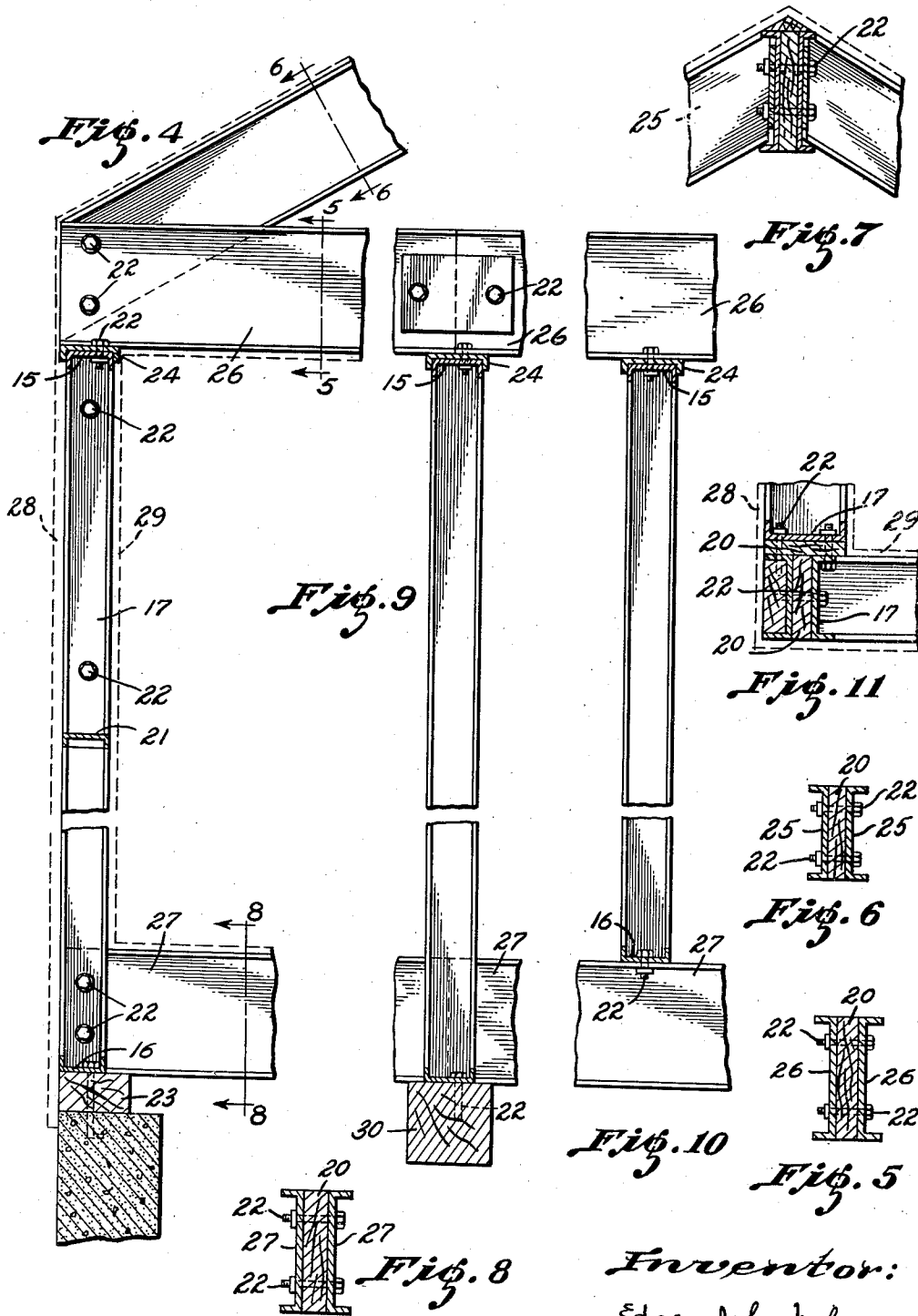
July 20, 1948.

E. J. MOLONEY
BUILDING CONSTRUCTION

2,445,491

Filed June 19, 1946

2 Sheets-Sheet 2



Inventor:
Edgar John Moloney.

UNITED STATES PATENT OFFICE

2,445,491

BUILDING CONSTRUCTION

Edgar John Moloney, East Orange, N. J.

Application June 19, 1946, Serial No. 677,843

1 Claim. (Cl. 189—1)

1

This invention relates to building construction, and more particularly to houses and the like, adapted to be erected from preformed or fabricated units.

While this invention can be used for large or small houses, bungalows, garages, and similar structures, it will hereinafter be described with particular reference to a one story bungalow, as illustrated.

This construction consists of rectangular preformed structural interchangeable building wall panels of metal comprising a frame having channel shaped members at top, bottom and sides respectively and with one or more additional vertical members, equally spaced across the panel. The channel shaped sides of adjoining panels are separated by a continuous nailing strip of wood or other material, which extends from exterior face to interior face of panel. Other means between adjoining panels pass through the nailing strips and secure them in place. The additional vertical members equally spaced across the panel, consist of two channel shaped members placed back to back and separated by a continuous nailing strip of wood or other material, extending from exterior face to interior face of panel. The channels and nailing strips are fastened together and form a complete assembly. The exterior wood sheathing can be nailed to the exterior surface of the nailing strips and the interior wall board can be nailed to the interior surface of the nailing strips. The floor construction consists of two metal channel shaped members placed back to back and separated by a continuous nailing strip of wood or other material; this nailing strip extends from the top surface to the bottom surface of the channels; the channels and nailing strips are fastened together and form a complete assembly. The finish floor can be nailed to the nailing strips. The roof and ceiling construction is similar to the floor construction.

This invention consists in the novel features of construction, combination of parts, and in the unique relation of the members, and the unique assembly including continuous nailing strips.

To enable others skilled in the art to fully comprehend the underlying features of this invention, drawings depicting one of the several forms of this invention have been annexed as part of this disclosure, and in such drawings, like characters or references denote corresponding parts thruout all of the views in which—

Fig. 1 is an elevational perspective view of one form of bungalow or cottage constructed in accordance with my invention.

2

Fig. 2 is a fragmentary elevation on an enlarged scale of the bungalow of Fig. 1.

Fig. 3 is a section through the wall panel unit. Line 3—3 on Fig. 2.

Fig. 4 is a section on line 4—4 on Fig. 2.

Fig. 5 is a section through ceiling beam. Line 5—5 on Fig. 4.

Fig. 6 is a section through roof beam. Line 6—6 on Fig. 4.

Fig. 7 is a vertical section through ridge of roof.

Fig. 8 is a section through floor beam. Lines 8—8 on Fig. 4.

Fig. 9 is a vertical section through an interior load bearing partition.

Fig. 10 is a vertical section through a non load bearing partition.

Fig. 11 is a horizontal section through an exterior corner of house.

Referring to the drawings in detail, and more particularly to Fig. 1, there is illustrated a conventional form of bungalow, which rests on a suitable foundation, with or without a cellar.

The exterior walls and interior partitions are composed of rectangular preformed structural interchangeable wall panels of metal, and adjoining panels are secured together by fastening devices.

Fig. 1 shows a conventional bungalow with interchangeable wall panels 12, door panel 13, window panel 14.

The panels are prefabricated. Each panel 12 comprises a frame made up of channel members forming the top 15, bottom 16, and side member 17.

Intermediate vertical stiffeners are provided by channels 18 spaced in pairs across the frame and the frame is completed by gusset plates 19 and horizontal channel braces 21 secured to the sides 17 and intermediate vertical members 22.

Panels 13 and 14 are suitably constructed to contain door and window frames. A nailing strip 20 of wood or other suitable material is placed between each pair of vertical channels 18 and secured to them by bolts 22. A nailing strip 20 is also placed between each pair of adjacent panel frame members 17, the adjacent panels and strips being held together by bolts 22. The strips 20 extend from one side to the other of the panels.

The wall panels rest on and are bolted to a bottom wall plate 23 and are also bolted to a top channel plate 24. Rafters are formed from channels 25 bolted to intervening strips 20. Ceiling beams are formed of channels 26 bolted to strips 20. The ceiling beams are secured at their ends

3

on top of plate 24. The vertical parts of the rafter beams are passed between the pairs of channels 26 of the ceiling beams and bolted thereto as shown in Fig. 2. Similarly floor beams are formed by pairs of channels 27 secured to intervening strips 20 and the floor beams are secured to the members 17 and 18 by passing the vertical portions of the floor beams between the pairs of channel members 17 and 18 and securing the members together by bolts 22.

Corners of the building are formed as shown in Fig. 11 by bolting the end of one panel against the side of another panel and filling out the corner space by an added channel member and filler strip.

Interior load bearing and non-load bearing partitions may be constructed as are the outside walls.

Exterior and interior siding, indicated in dotted lines at 28 and 29 is nailed to strips 20 to complete the structure.

I claim:

A building having exterior walls and interior partitions composed of preformed structural interchangeable rectangular building wall panels of metal, each of said panels comprising a frame having a channel shaped cross section at the top, bottom and two sides, with one or more additional vertical members equally spaced across the panel, and with a horizontal stiffening member, and with adjoining panels secured together by fastening devices, and with continuous nailing strips placed between side channel frames of adjoining panels and secured in place by bolts securing the panels together, and with continuous nailing strips secured in place between the channel shaped additional vertical members of panels

4

with fastening devices, and with floor, ceiling and roof beams each composed of two preformed channel shaped members placed back to back and separated by a continuous nailing strip, secured in place between the channel shaped members by fastening devices, and with said floor beams secured to exterior wall panels by the vertical sections of the floor beams passing between adjoining wall panels, and being bolted to wall panels, and with said roof beams secured to said ceiling beams by the vertical sections of roof beams passing between the vertical sections of the ceiling beams, and being bolted to the ceiling beams, and with the wall panels secured to a continuous sill at the bottom by fastening devices, and with the wall panels having a continuous channel shaped sill at the top to which the wall panels are secured by fastening devices, and with the ceiling beams secured to the wall sill at the top by fastening devices.

EDGAR JOHN MOLONEY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,262,156	Adrian	Apr. 9, 1918
1,821,015	Hull	Sept. 1, 1931
1,828,953	Wissheier	Oct. 27, 1931
1,955,818	Marshall	Apr. 24, 1934
2,155,709	Patterson	Apr. 25, 1939

FOREIGN PATENTS

Number	Country	Date
414,277	Great Britain	1934