

March 30, 1937.

M. G. VASS

2,075,773

BUILDING CONSTRUCTION

Filed Aug. 9, 1935

2 Sheets-Sheet 1

Fig. 3

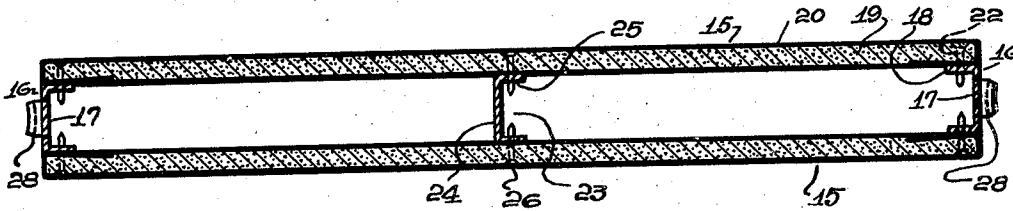


Fig. 2

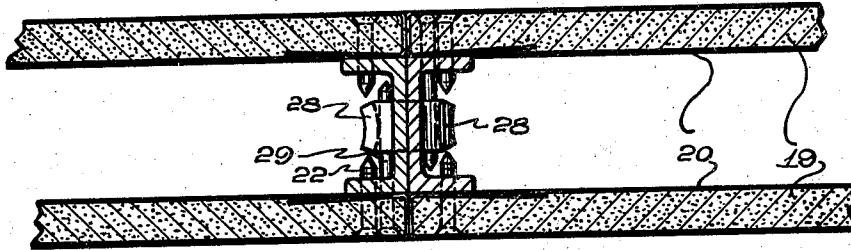


Fig. 1

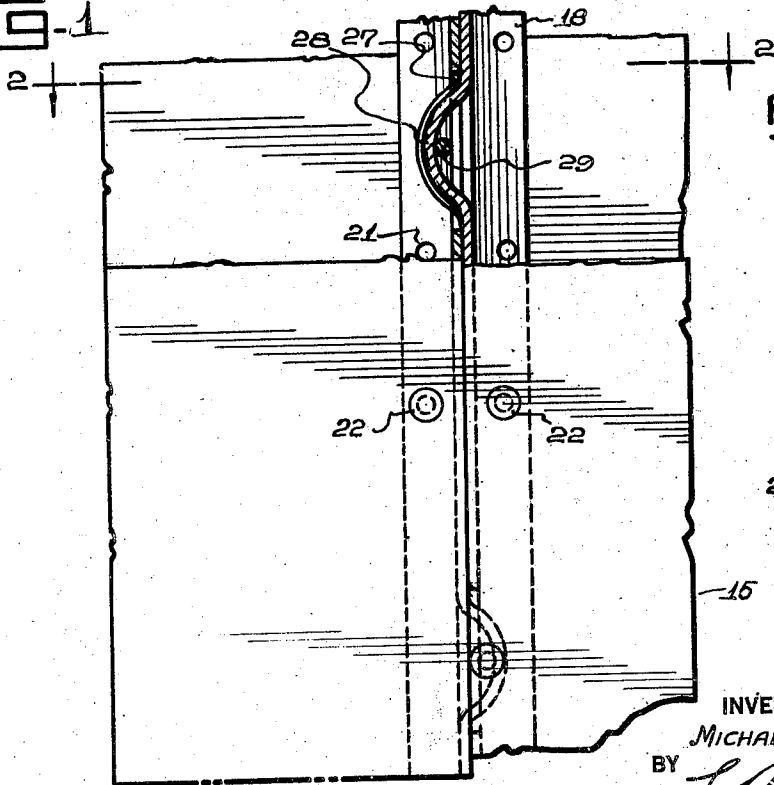
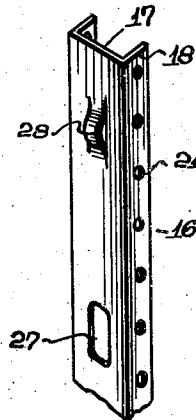


Fig. 4



INVENTOR
MICHAEL G. VASS.
BY *L. A. Poley*
ATTORNEY

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FIG-7

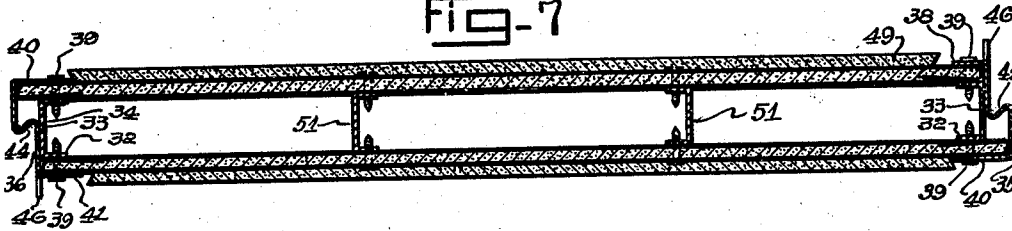


FIG-6

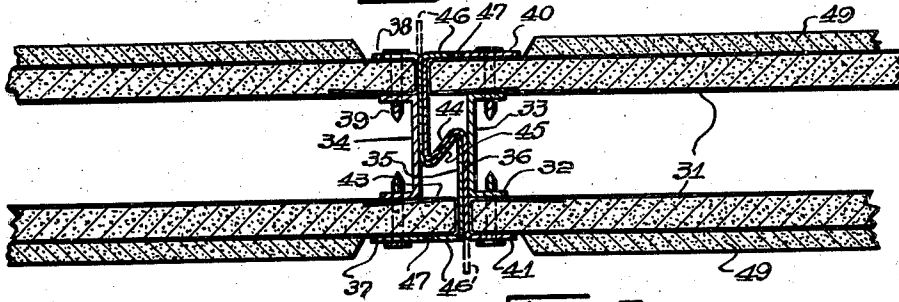


FIG-5

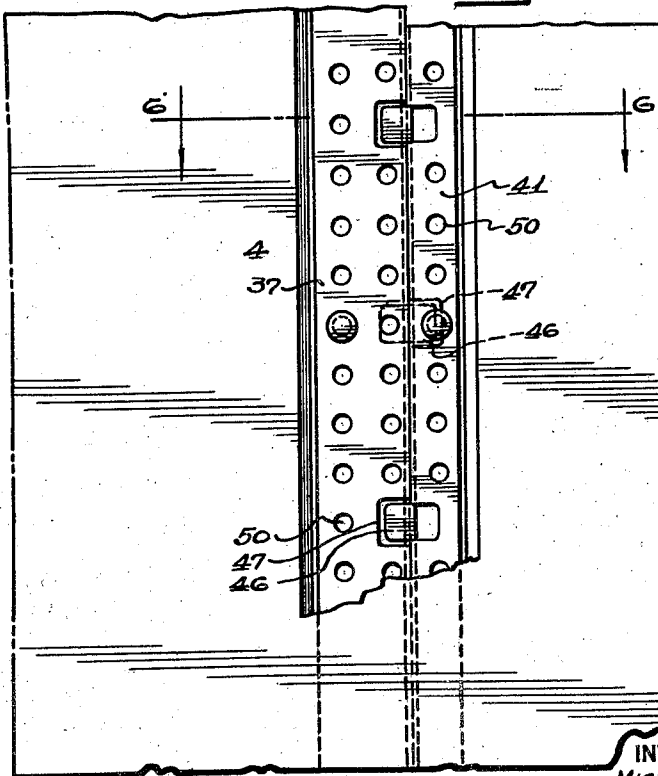


FIG-8

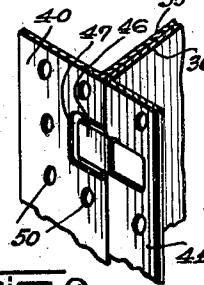
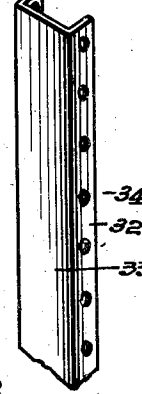


FIG-9



INVENTOR
MICHAEL G. VASS.

BY

L. A. Paley
ATTORNEY

UNITED STATES PATENT OFFICE

2,075,773

BUILDING CONSTRUCTION

Michael G. Vass, Maywood, Ill., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois

Application August 9, 1935, Serial No. 35,421

11 Claims. (Cl. 72-46)

This invention relates to building constructions, and has reference more particularly to factory made partition units suitable for quick erection and dis-assembly.

In the erection of partitions and other building constructions, it is desirable to provide factory made units which can be made cheaply at a central manufacturing point, shipped to the job, and quickly erected with a minimum of costly labor. It is also desirable that these partition units be easily dis-assembled to permit rearrangement of rooms. In the manufacture of said units, it is desirable that standard building boards be used, such as gypsum board, hard board, insulation board, sheet metal, plywood, asbestos board, etc.

An object of this invention therefore, is to provide factory made partition units which can be cheaply fabricated at a central point and easily erected in the field to form a finished partition.

Another object of the invention is to provide a partition unit which can be easily assembled and then dis-assembled to permit rearrangement of rooms.

A further object of the invention is to provide a unit partition structure which utilizes standard building boards; also to improve building constructions in other respects hereinafter specified and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which—

Fig. 1 is a fragmentary elevation of a building unit joint with parts broken away to disclose the construction,

Fig. 2 is a sectional plan view through the partition joint taken on line 2—2 of Fig. 1,

Fig. 3 is a sectional plan view through the partition unit,

Fig. 4 is a perspective view of a channel strip used in constructing the partition unit,

Fig. 5 is a fragmentary elevation of a modified form of partition joint,

Fig. 6 is a sectional plan view through the modified joint taken on line 6—6 of Fig. 5,

Fig. 7 is a sectional plan view through the modified partition unit,

Fig. 8 is a sectional perspective view of a portion of a unit edge strip, and

Fig. 9 is a perspective view of a channel strip used in the modified partition unit.

Referring to the drawings by numerals, building boards 15 are arranged in pairs in spaced parallel relation, and are connected at their edges by channel strips 16, the latter including webs 17

and outstanding flanges 18. The boards 15 may be any suitable building board well known in the art, such as gypsum board with a cementitious core 19 and paper cover sheets 20, hard or pressed board, insulation board, sheet metal, plywood, asbestos board, etc. The flanges 18 are preferably provided with a series of perforations 21 which ordinarily need not be threaded to receive screws 22 of the type commonly known as drive screws. Similar channel strips 23 are provided intermediate the edges of the boards, these channels 23 comprising webs 24 and flanges 25 which are secured by screws 26 to the boards 15. These channels 23 retard deflection of the boards between the channels 16. The channels 16 and 23 support the boards 15 to form a hollow building unit of considerable area adapted to be secured at the bottom and top to the floor and ceiling, respectively, (not shown) of a room. The edge channels 16 are arranged with their webs 17 outermost so that when the building units are placed in edge abutting relation, the webs 17 of adjoining units will be abutting. In order to lock the webs 17 together, each of the webs is provided with complementary slots 27 and struck out loops 28, the loops of one web 17 being so spaced as to register with and extend through the slots 27 of the abutting web. Screws 29 are then inserted through the boards 15 and through holes in the channel flanges 18 to engage in the loops 28 and thus lock the building units together to form a partition. The exposed screw heads and the joints between building units are then smoothed up with putty or other cementitious material, and plastic paint, wall paper, etc., is applied to the exposed faces of the boards. The partition is easily dis-assembled by removing the screws 29 and disconnecting the units at top and bottom.

In the form of the invention shown in Figs. 5-9, boards 31 are secured to perforated flanges 32 formed on webs 33 of channel strips 34. Complementary Z-shaped metal strips 35 and 36 extend between the adjoining edges of the finished partition units. Outstanding flanges 37 and 38 are formed on the strip 35, and embrace the edges of the boards 31, the edges being secured by screws 39 between each flange 37 and 38 and the flanges 32. Similar flanges 40 and 41 are provided on the strip 36, being secured to the boards in the same manner as described for strip 35. One of the boards 31 of each unit is somewhat offset from the other board of the unit to produce an outstanding edge 43 which provides clearance between the units for

Z-shaped sections 44 and 45 of the strips 35 and 36. Lugs 46 are struck out from the flanges 38 and extend at right angles to the plane of the boards 31 when the units are being assembled in edge-to-edge relation. In order to lock the Z-sections 44 together, lugs 46 are then bent at right angles to lie in the plane of boards, being received in clearance slots 47 formed in the flanges 40 (Figs. 5 and 8). If desired, the boards 31 may be coated at the factory with plaster 49 or other cementitious material, over most of their area, leaving only sufficient uncoated area at the edges of the units to receive the flanges 37, 38, 40 and 41. After assembling the units, the uncoated area at the joint is filled up level with plaster, a plurality of holes 50 being provided in the flanges 37, 38, 40 and 41 to provide a better bond for the joint plaster. Intermediate channels 51 similar to channels 34 are provided in the center of the building unit to impart added stiffness to the boards. The units are dis-assembled by removing the joint cement, bending up the lugs 46 to a position vertical to the plane of the boards, and disconnecting the Z-sections 44 by a lateral relative movement of the partition units.

I would state in conclusion that while the illustrated examples constitute practical embodiments of my invention, I do not wish to limit myself precisely to these details, since manifestly the same may be considerably varied without departing from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A building unit, comprising a pair of wall panels in spaced, parallel relation, complementary stud members secured along each opposite edge of said panels to form a preformed unit, said stud members being arranged to interengage one with the other to form a partition, and means for rigidly and removably locking said stud members together.

2. A building unit, comprising a pair of wall panels in spaced, parallel relation, channel shaped stud members having webs and outstanding flanges, said flanges being secured to adjoining edges of said wall panels to form preformed building units, and means associated with said webs for rigidly and removably locking said webs together to form a partition of building units.

3. A building unit, comprising a pair of wall panels in spaced, parallel relation, metallic channel strips having webs and outstanding flanges, said flanges having a series of perforations, and abutting adjoining edges of said wall panels, screws passing through said wall panels and engaging in said perforations to form a preformed building unit, and means for rigidly and removably locking said units together in edge abutting relation to form a partition.

4. A building unit, comprising a pair of wall panels in spaced, parallel relation, a pair of

channel strips connecting opposite edges of said wall panels, said strips having Z-shaped complementary webs and outstanding flanges secured to said edges, and bendable lugs struck from some of said flanges and being adapted to be bent into locking engagement with an adjoining channel strip.

5. A structure as defined in claim 4 characterized by spacer strips between said panels adjacent said Z-shaped webs, said panels being connected to said spacer strips to form a preformed building unit.

6. A building unit, comprising a pair of wall panels in spaced, parallel relation, a pair of channel strips connecting opposite edges of said wall panels to form a preformed building unit, said strips each having a web and outstanding flanges, said webs being provided with alternating slots and struck out loops, said units being adapted to be arranged in edge-to-edge relation with the loops of one web extending through registering slots of an adjoining web, and locking members extending through said interlocking loops to connect said units together.

7. A preformed hollow partition unit comprising a pair of composition building boards in spaced, parallel relation, spacer strips secured along opposite edges of said boards to form a hollow unit, and means for rigidly and removably securing complementary strips of said units together to form a partition.

8. A structure as defined in claim 7, characterized by spacer strips intermediate the edge spacer strips and secured to the boards of a unit to reduce deflection of said boards intermediate said edge spacer strips.

9. In a building construction, a plurality of hollow building units arranged in edge abutting relation, each of said units comprising a pair of building boards in spaced, parallel relation, spacers for the edges of said boards comprising channel strips having perforated flanges to which said boards are attached by screws, and means for rigidly and detachably securing adjoining channel strips together.

10. In a building construction, a plurality of hollow building units arranged in edge abutting relation, each of said units comprising a pair of building boards in spaced, parallel relation, spacers for the edges of said boards comprising channel strips having flanges to which said boards are attached, said strips being arranged in web abutting relation and being rigidly and detachably secured together.

11. A building construction, comprising a pair of building boards in spaced, parallel relation, channel strips connecting the edges of said boards to form a unit, said strips having flanges and Z-shaped complementary webs, said webs being adapted to interengage when said units are in edge abutting relation so as to form a partition, and means for removably locking said units together.

MICHAEL G. VASS.