July 15, 1941. E. S. GUIGNON, JR 2,249,203

JOINT ANCHOR FOR PORTABLE STRUCTURES

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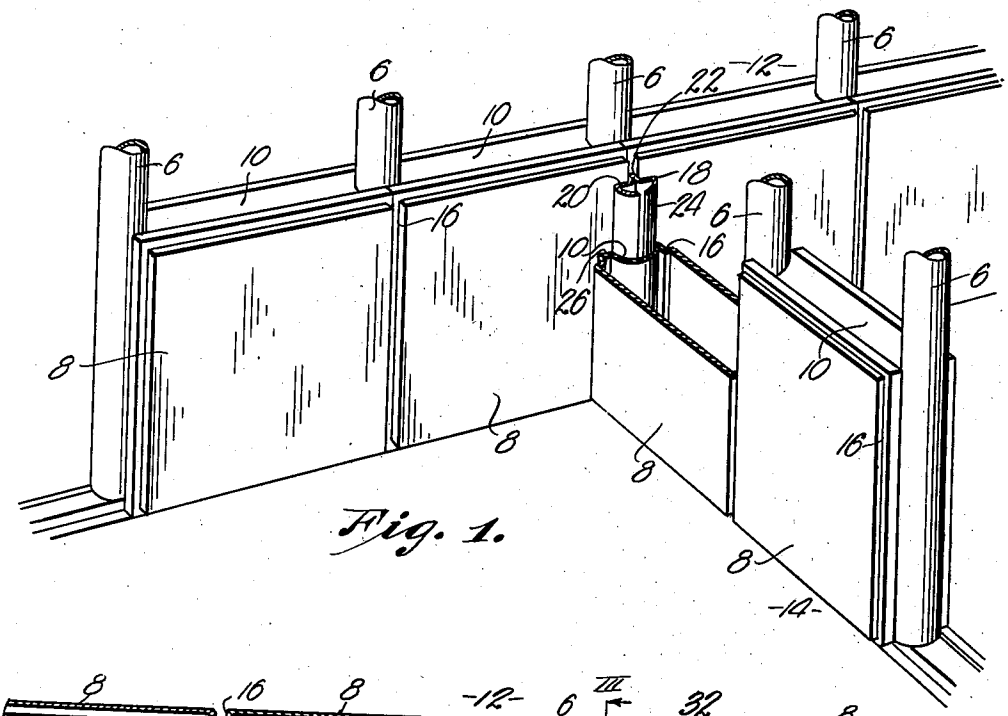


Fig. 1.

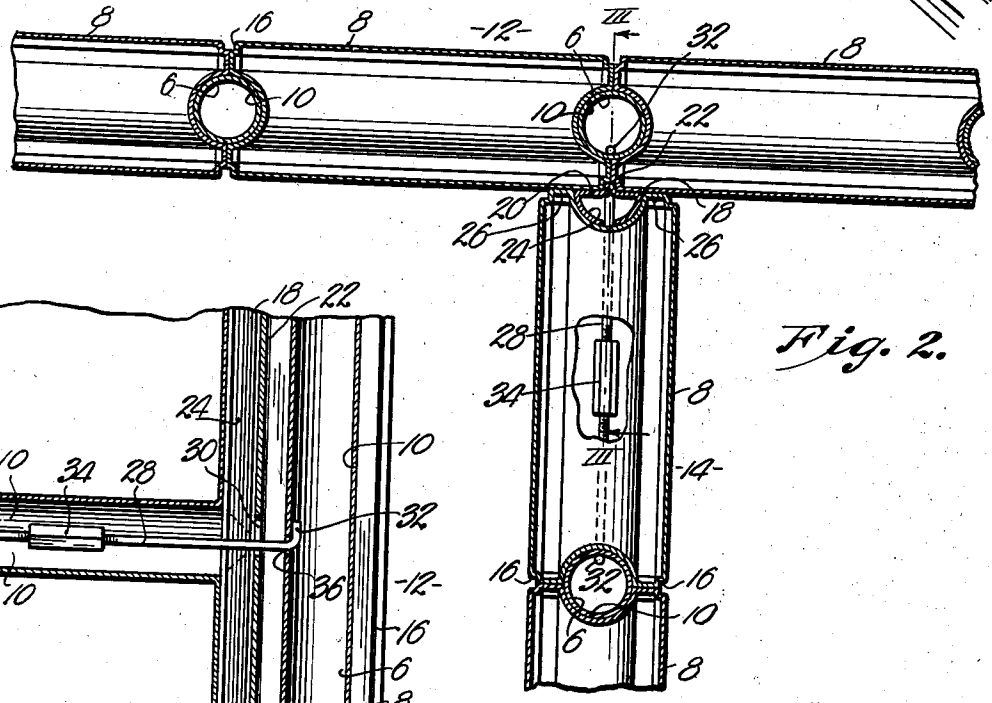


Fig. 2.

Fig. 3.

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JOINT ANCHOR FOR PORTABLE STRUCTURES

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Application February 5, 1940, Serial No. 317,392

5 Claims. (Cl. 189—34)

This invention relates to portable building structures in the nature of those illustrated and described in my co-pending application Serial No. 237,913 and having blocks forming a part thereof, such as those shown in my U. S. Letters Patent No. 2,134,941, issued November 1, 1938.

The primary object of this invention is to provide unique anchoring means for the joint that is formed between two walls, one of which extends perpendicularly from the other.

This invention has for a further aim the provision of an anchor that is formed to present parts engageable with the grooved edges of building blocks and other portions made to enter the offset portions of said building blocks so that lateral movement of one of the walls with which the anchor is used, is precluded.

A further object of this invention is to provide a portable building structure wherein is included walls that have a plurality of vertical, tubular members supporting a number of blocks, the joint between said walls being formed in part by the specially made anchor, portions of which cooperate with the blocks in both walls, which anchor is partially held in place by a tie-rod secured to adjacent vertical members of the walls in a manner to maintain the anchor in operative position.

Other objects of this invention will appear during the course of the following specification, referring to the accompanying drawing wherein:

Figure 1 is a fragmentary perspective view of a portable building having a joint made to embody the present invention.

Fig. 2 is a fragmentary horizontal sectional view through the meeting portions of two walls of a portable building, made in accordance with the present invention; and,

Fig. 3 is a fragmentary sectional view taken on line III—III of Fig. 2.

As will be apparent from an understanding of my above identified patent, the portable building structure with which this invention is adapted to be used, comprises a series of vertical, tubular members 6 between which is positioned the building blocks 8, each of which has a groove 10 formed along each edge thereof. Each edge wall of each block 8 is rendered concave on a radius the same as the radius of the vertical tubes 6 so that interlocking may occur when the blocks are in the operative position to form a building wall, one of which is generally indicated by the numeral 12, while a second wall is indicated generally by the numeral 14.

Each block 8 has an offset along the line of juncture between the edges and the sides thereof, which offset 16 cooperates with the similar element of the next adjoining block 8 to form a groove for the reception of a portion of the hereinafter described anchor strip.

When blocks 8 are arranged with tubes 6 to form end walls 12 or 14, the edges are in vertical and horizontal alignment and the blocks are disposed in tiers so that the grooves formed by offsets 16 are continuous and are not interrupted from bottom to top of each wall. Because of this structural peculiarity of wall 12, for example, and because such arrangement occurs wherever a wall made in accordance with my concepts appears, the anchor strip designated generally by the numeral 18 may be employed to form a part of the joint between wall 12 and a partition wall in the nature of 14. When such a strip 18 is used, it is unnecessary to remove from the wall any of blocks 8 or to employ fastening means which will mar any of the blocks and which would be difficult to remove when the partition wall 14, for instance, was no longer desired.

Strip 18 comprises a flat part 20 having a longitudinal bead 22 formed thereon along a medial line intermediate the longitudinal edges thereof. This flat part lies against the outer faces of two adjoining blocks 8, the edges of which are in abutting relation, while bead 22 is projected into the cooperating offsets 16 of said blocks 8.

A transversely arched portion 24 extends outwardly from each longitudinal edge of flat part 20 and into grooves 10 of the stacked blocks 8 that are to form a portion of second wall 14.

When the joint is complete, as shown in Figs. 2 and 3, the outer face of flat part 20 is against the faces of blocks 8 and in the same plane as the flat portions 26 on each side of groove 10. These portions 26 bear directly against the faces of blocks 8 forming a part of wall 12 and therefore, a strip 18 is not visible when the structure is complete.

Arcuate portion 24 may be in the nature of two outwardly and inwardly inclined flanges, the free ends of which are spaced apart to provide a space for the reception of a tie-rod 28.

The radius of arcuate portion 24 is the same as the radius of groove 10 and likewise must be the same as vertical tubes 6. Interchangeability of the parts, and especially blocks 8, therefore, is manifest.

The flat portion and bead 20 and 22 respectively, of strip 18, has perforations 30 formed therethrough for the passage of tie-rod 28, and these perforations 30 are in alignment with the space between the free ends of the flanges which

form the arcuate portion 24. Obviously, the arcuate portion may be a continuous piece, if desired, and such perforations as needed may be formed therethrough so that tie-rod 28 may be moved to the operative position, as shown in Figs. 2 and 3. Each tie-rod has a laterally extending head 32 thereon and a turn-buckle 34 so that the two sections may be drawn together to tighten the joint which includes strip 18.

The hole 36 in tubes 6 receives head 32 and when tie-rod 28 is drawn taut, as seen in Fig. 2, wall 12 cannot move away from the edge of second wall 14. This lateral movement in one direction on the part of wall 12, is precluded by tie-rods 28, and movement in the opposite direction would be against wall 14, and therefore, limited. Lateral movement in either direction of second wall 14 is obviously precluded by the interlocking function of strip 18.

It is notable that this strip is not secured in any way to either wall other than by the form of its various parts being engageable with the complementary portions of blocks 8 and therefore, assembly and disassembly may occur without difficulty. Partitions, such as second wall 14 may be placed in buildings and removed therefrom without altering the nature of the outer walls.

Having this described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In a portable building structure having a wall comprising a plurality of blocks arranged in edge-to-edge relation and each provided with concave edge walls presenting grooves along each edge thereof, and an offset at the lines of juncture between the edge walls and the sides thereof, and a second wall of like blocks extending laterally from the first mentioned wall, the combination of an anchor disposed at the joint between the two walls comprising a transversely arched portion nested in the grooves of the concave edge walls, a flat part against the face of the first mentioned wall, and a longitudinal bead extending into the offsets of the adjacent blocks of the first mentioned wall.

2. In a portable building structure having a wall comprising a plurality of blocks arranged in edge-to-edge relation and each provided with concave edge walls presenting grooves along each edge thereof, and an offset at the lines of juncture between the edge walls and the sides thereof, and a second wall of like blocks extending laterally from the first mentioned wall, the combination of an anchor disposed at the joint between the two walls comprising a transversely arched portion nested in the grooves of the concave edge walls, a flat part against the face of the first mentioned wall, and a longitudinal bead extending into the offsets of the adjacent blocks of the first mentioned wall, said flat part of the anchor being in the same plane as the outer face of the edges of the blocks of said second wall.

3. In a portable building structure having a wall comprising a plurality of blocks arranged in edge-to-edge relation and each provided with concave edge walls presenting grooves along each edge thereof, and an offset at the lines of juncture between the edge walls and the sides thereof, and a second wall of like blocks extending laterally from the first mentioned wall, the combination of an anchor disposed at the joint between the two walls comprising a flat part against the face of the first mentioned wall, a longitudinal bead extending into the offsets of the adjacent blocks of the first mentioned wall, and transversely arched flanges along one side of the flat part of the anchor extending into the grooves of the blocks of the second wall.

4. In a portable building structure having a wall comprising a plurality of blocks aranged in edge-to-edge relation and each provided with concave edge walls presenting grooves along each edge thereof, and an offset at the lines of juncture between the edge walls and the sides thereof, and a second wall of like blocks extending laterally from the first mentioned wall, the combination of an anchor disposed at the joint between the two walls comprising a flat part against the face of the first mentioned wall, a longitudinal bead extending into the offsets of the adjacent blocks of the first mentioned wall, and transversely arched flanges along one side of the flat part of the anchor extending into the grooves of the blocks of the second wall, said flanges and the concave edge walls of the blocks in the second wall being concentric.

5. In a portable building structure having a wall comprising a plurality of blocks arranged in edge-to-edge relation and each provided with concave edge walls presenting grooves along each edge thereof, and an offset at the lines of juncture between the edge walls and the sides thereof, and a second wall of like blocks extending laterally from the first mentioned wall, the combination of an anchor disposed at the joint between the two walls comprising a flat part against the face of the first mentioned wall, a longitudinal bead extending into the offsets of the adjacent blocks of the first mentioned wall, and transversely arched flanges along one side of the flat part of the anchor extending into the grooves of the blocks of the second wall, the free edges of said flanges being spaced apart, said first mentioned wall and the second wall having tie-rods extending through the anchor, between the edges of said flanges.

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