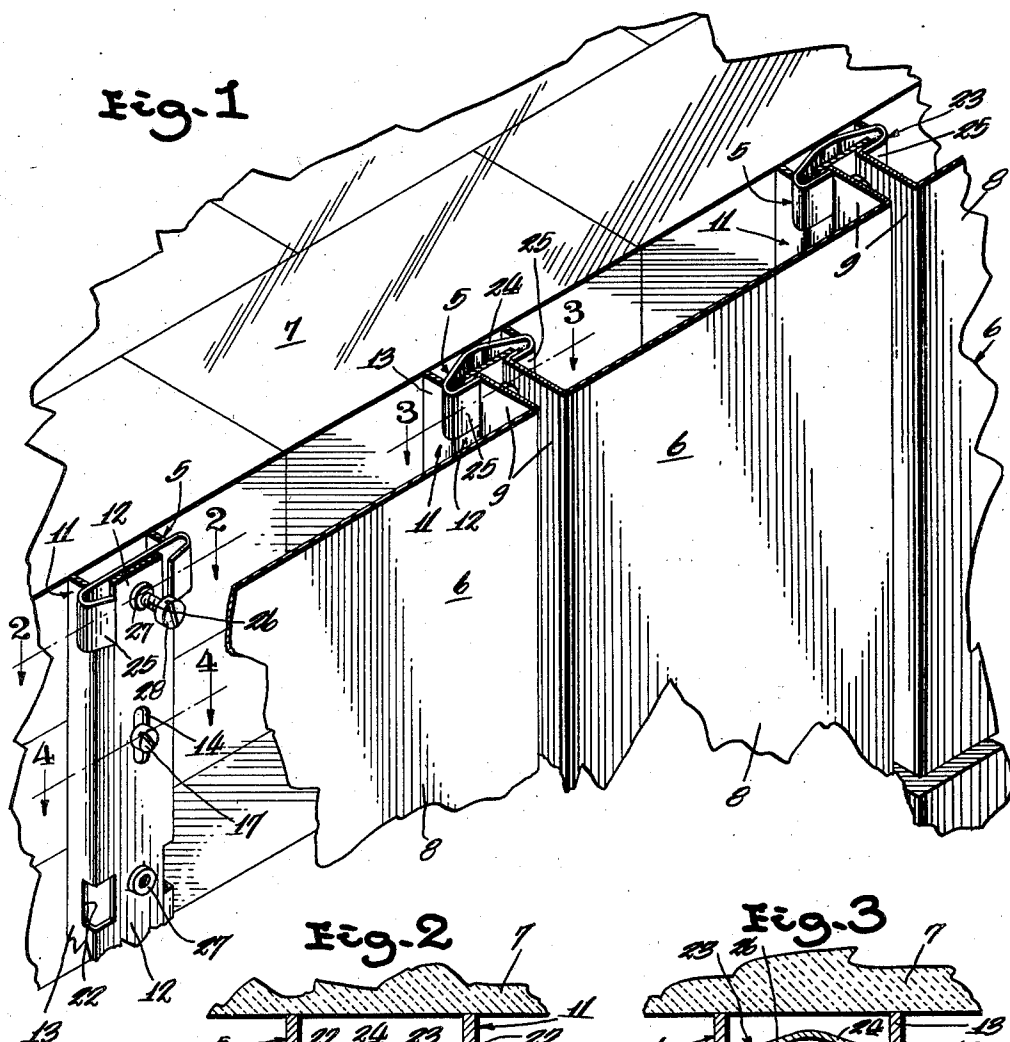
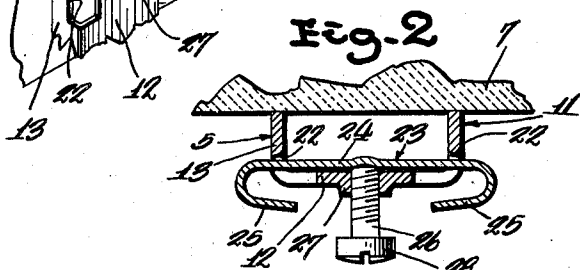
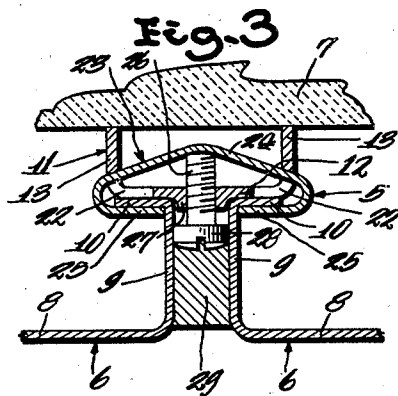
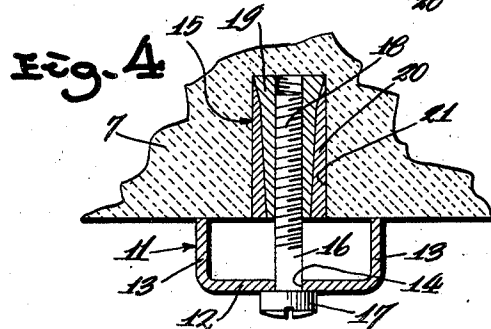


May 10, 1938.

F. E. McCABE
BUILDING STRUCTURE
Filed June 1, 1935

2,116,530

2 Sheets-Sheet 1



Frank E. McCabe
INVENTOR
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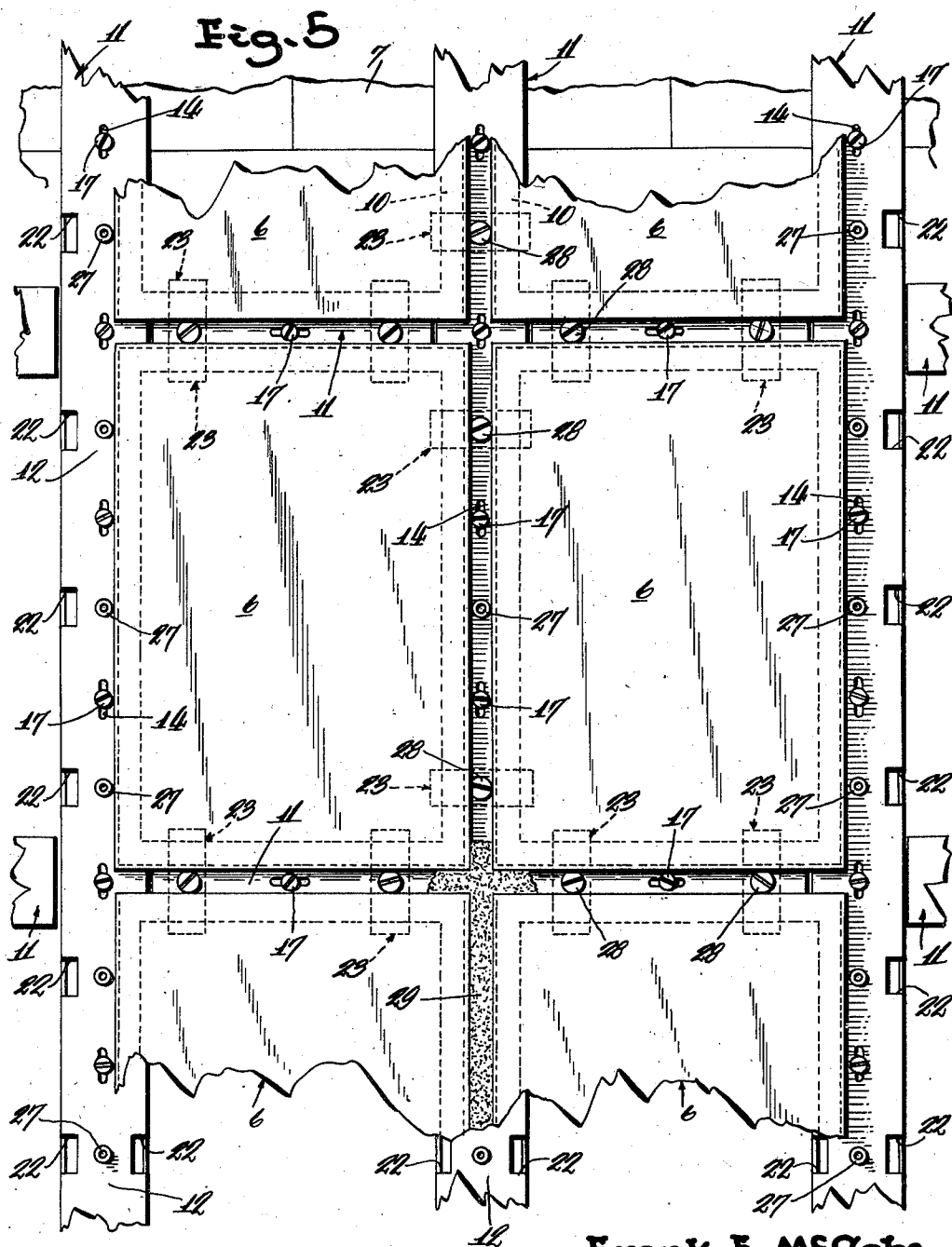
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BUILDING STRUCTURE

Filed June 1, 1935

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,116,530

BUILDING STRUCTURE

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Application June 1, 1935, Serial No. 24,520

6 Claims. (Cl. 189—85)

This invention relates to building structures, and more particularly to face-work building structures, and has for an object the provision of new and improved structures of this character.

In the drawings accompanying this specification and forming a part of this application, I have shown, for purposes of illustration, one embodiment which my invention may assume, and in the drawings:

Figure 1 is a fragmentary perspective view of a building structure, embodying the invention, disclosing parts of the same in horizontal section, and broken away to more clearly illustrate the construction,

Figure 2 is an enlarged fragmentary horizontal sectional view corresponding substantially to the line 2—2 of Figure 1, showing the parts in one position of operation,

Figure 3 is a view similar to Figure 2, corresponding substantially to the line 3—3 of Figure 1, and showing the parts in a different position of operation.

Figure 4 is an enlarged fragmentary horizontal sectional view corresponding substantially to the line 4—4 of Figure 1, while

Figure 5 is a composite front elevational view of a building structure, showing the manner of installation.

As shown in the drawings, the invention comprises a building structure, wherein a plurality of securing means, indicated at 5, are employed to secure a plurality of facing panels 6 to a supporting wall 7, which may be the front wall of a building, or any support to which it is desired to attach the panels 6. Each of the panels 6 preferably comprises an elongated channel-shaped formation of enameled sheet metal, having an intermediate portion 8, angular webs 9, and in-turned laterally disposed marginal portions 10, the panels 6 being adapted to be secured side by side and flatwise along the supporting wall 7.

The securing means 5 are all alike, and each comprises an elongated channel-shaped member 11, of sheet metal, having an intermediate portion 12, and flanges 13 along opposite edges adapted to rest against the supporting wall 7, and the intermediate portion 12 is provided at suitable intervals along its length with slots 14, each elongated in the direction of the length of the member 11. Taking through each of the slots 14 is an anchoring member 15, comprising a screw-bolt 16, having a head 17 bearing against the outer face of the intermediate portion 12, and a shank 18 threaded into a wedge part 19, encased in an expansible sleeve 20, which may be of

lead. The wedge part 19 and sleeve 20 may be accommodated in a suitable cavity 21 formed in the wall 7. Rotation of the bolt 16 draws the wedge part 19 inwardly to expand the sleeve 20 into anchoring engagement with the wall of the cavity 21, and when all of the anchoring members 15 have been tightened, the securing member 11 is fixedly secured to the supporting wall 7, and the slots 14 permit necessary movement incident to expansion and contraction under varying conditions.

The portions 12 and 13 of each of the securing members 11, at predetermined intervals, are slotted to form a plurality of sets of spaced slots 22, the number of sets of slots 22 which are provided preferably being in excess of the number of fastening means employed, so that it is possible to select slots at different locations, with respect to the facing member and to the securing means, at which the fastening means may be most effectively employed. Adapted for insertion through any selected set of the slots 22 are fastening means which may be in the form of a securing member 23 comprising an elongated strip 24 of relatively stiff, partially form-retaining, slightly resilient, sheet metal, with its end portions adapted to project at each side beyond the side flanges 13 of the member 11, and formed into oppositely turned hook-shaped clamping members 25, adapted to accommodate the marginal securing portions 10 of the panels 6.

Cooperable with each securing member 23 is an actuating screw-bolt 26, threaded into a thickened part 27 of the intermediate web portion 12 of the securing member 11, and adapted to engage the securing member 23 between its ends, so as to flex the securing member 23 to draw the hooked clamping members 25 toward each other, and into engagement with the marginal portions 10 of the panels 6, and to draw said marginal portions 10 toward the securing member 11, whereby the marginal portions 10 are clamped tightly in position. Each of the screw-bolts 26 has a head 28 of a predetermined size against which the intermediate portions 8 of the adjacent panels 6 may abut to insure uniform spacing thereof, and variable spacing to suit the occasion may be obtained by varying the size of the heads 28, or if desired, suitable collars or washers, not shown, larger than the heads 28, may be employed in connection with the bolts 16 to effect the same result.

There will be employed as many of the securing means 5 as are necessary, depending upon the number of panels 6 it is desired to fix in

position. Each of the securing means 5 (comprising the member 11, a plurality of anchoring means 15, a plurality of spaced securing members 23, and screws 26) is disposed between the adjacent edges of each pair of panels 6, and operate simultaneously to clamp the marginal portions 10 thereof in position and to insure proper alignment of the panels. When all of the panels 6 have been clamped in position by the securing means 5, cracks left between the edges of the panels 6 may be filled with any suitable filling material, as indicated at 29, to finish the face-work structure, and the filling material operates to lock the screws 26 against accidental loosening.

Employment of the described arrangement enables the panels to be securely attached with a minimum of effort, and the flexible, partially form-retaining, somewhat resilient character of the securing members 23, and the play afforded by the slotted accommodation of the expansion bolts 16, insures rigidity, while permitting necessary expansion and contraction of the structure. It also will be appreciated that the securing members 23 may be selectively positioned with respect to the sets of slots 22 as convenience dictates, and that the securing members, not only are insertable into the slots transversely of the securing members 11, but are adjustable laterally thereof to facilitate assembly of the panels 6 with respect to the securing means.

It will be apparent to those skilled in the art that I have accomplished at least the principal object of my invention, and it also will be apparent to those skilled in the art that the embodiment herein described may be variously changed and modified, without departing from the spirit of the invention, and that the invention is capable of uses and has advantages not herein specifically described; hence it will be appreciated that the herein disclosed embodiment is illustrative only, and that my invention is not limited thereto.

I claim:

1. Securing means of the character described, comprising: a device adapted to be secured to a support, having relatively movable means adapted to clamp an object therebetween, one of said relatively movable means being of substantially rigid material and having means supporting the other relatively movable means at spaced points, and said other relatively movable means being composed of bendable material, and actuating means for applying pressure to said bendable material intermediate the ends thereof to bend the same and effect approach of said ends toward said first mentioned relatively movable means.

2. A building structure of the character described, comprising: a support; a plurality of juxtaposed facing members for said support; a device for securing said facing members to said support, said device including a plurality of relatively movable means, the first of said means being fixedly positioned with reference to said support, and the second of said means being of bendable material, guided and supported at spaced points by said first means, and movable relative to said first means, and having securing elements

adapted to engage more than one of said facing members; and actuating means engageable with said second means at an angle thereto and between its spaced points of support to bend said second means, and draw said securing elements simultaneously into holding engagement with respect to a plurality of facing members.

3. Securing means of the character described, comprising: a device adapted to be secured to a support, having relatively movable means adapted to clamp an object therebetween, one of said relatively movable means being of substantially rigid material and having means supporting the other relatively movable means at spaced points, and said other relatively movable means being composed of bendable material; and actuating means for applying pressure to said bendable material intermediate the ends thereof to bend the same and effect approach of said ends toward said first mentioned relatively movable means.

4. A building structure of the character described, comprising: a support; a pair of facing members having juxtaposed edges, said edges being provided with angularly extending flanges; a device secured to said support, having relatively movable means adapted to clamp the juxtaposed edges of said facing members therebetween, the first of said relatively movable means being of substantially rigid material, and the second of said relatively movable means of bendable material, and provided with hooked portions engageable with the flanges of said facing members; and actuating means for applying pressure to the bendable material of said second relatively movable means between said hooked portions, to bend the same to clamping position with reference to said first means and to said facing members, and to draw said facing members edgewise toward each other.

5. A building structure, comprising: a support; securing means having a portion spaced outwardly from said support; facing means adapted to rest against the outer surface of said spaced portion; a clamping part carried by said securing means inwardly of said spaced portion and having means extending outwardly of said spaced portion and engageable with said facing means; and actuating means carried by said securing means for moving said clamping part inwardly toward said support to effect clamping engagement of said clamping part.

6. A building structure, comprising: a support; a channel-shaped formation secured to said support, having its web spaced outwardly from said support, and its flanges provided with aligned slots; facing means adapted to rest against the outer surface of said spaced portion; a clamping part extending through the slots in said flanges, inwardly of said spaced portion, and having means extending outwardly of said spaced portion and engageable with said facing means; and actuating means carried by said securing means for moving said clamping part inwardly toward said support to effect clamping engagement of said clamping part.

FRANK E. McCABE.