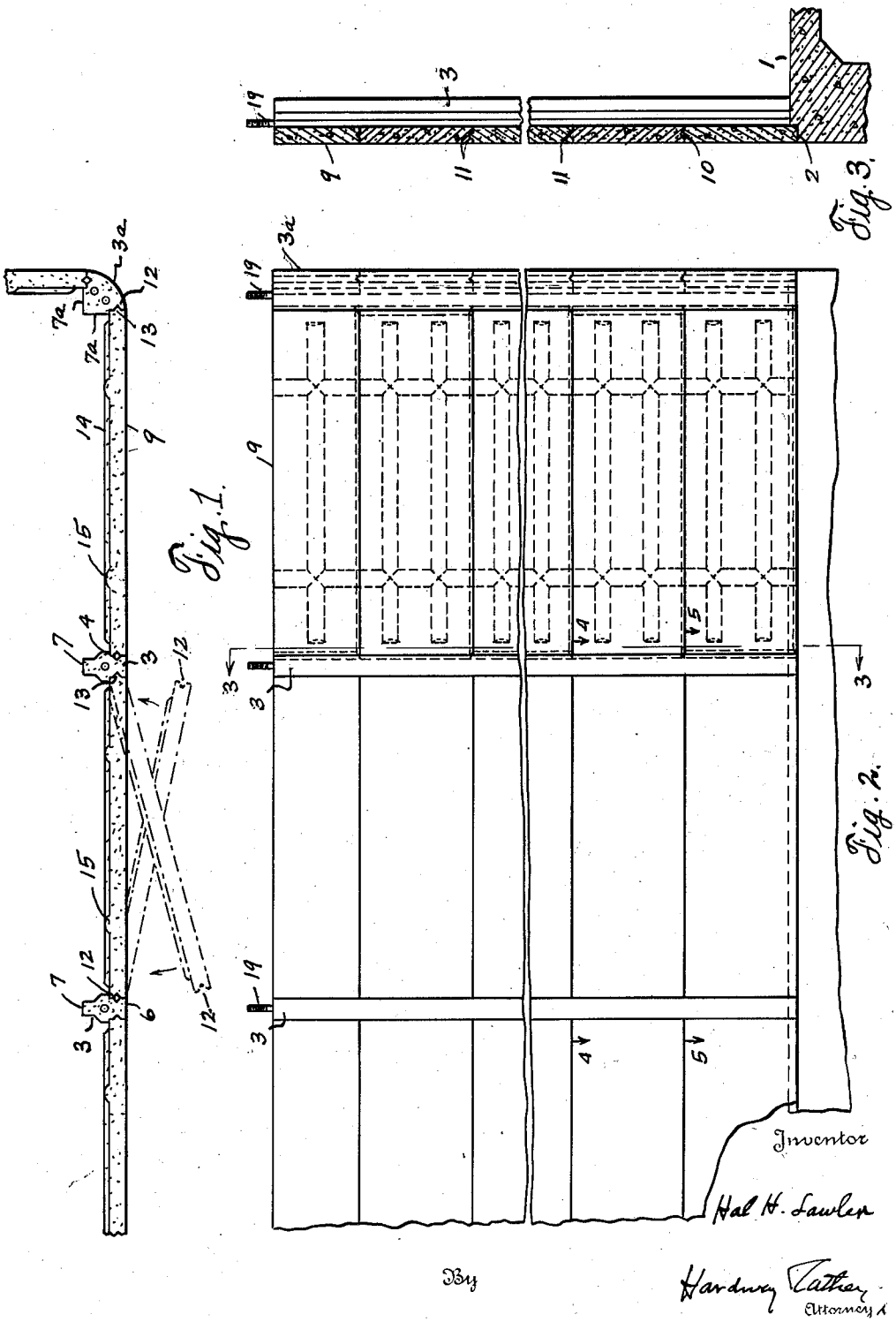
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CONCRETE CONSTRUCTION

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CONCRETE CONSTRUCTION

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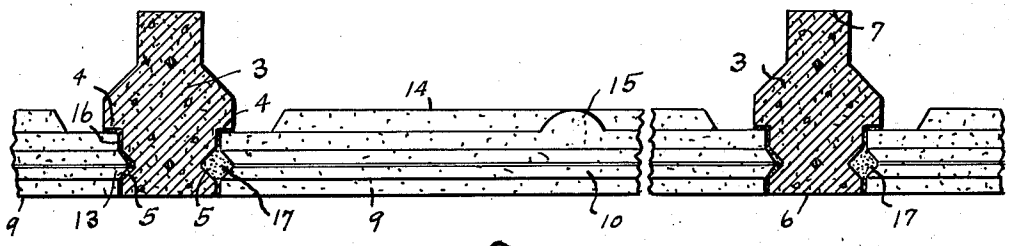


Fig. 4.

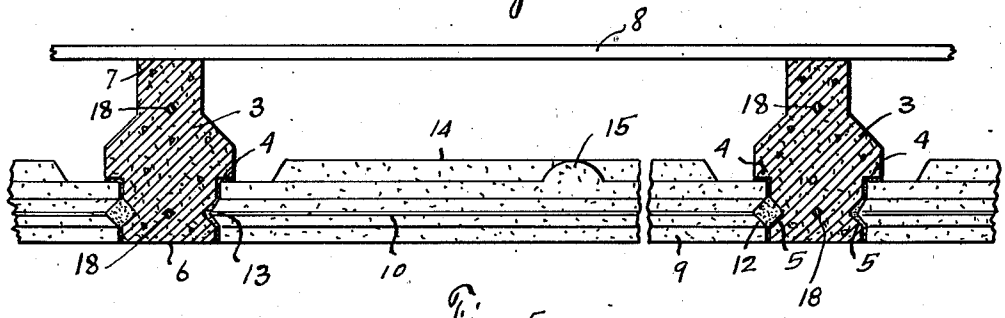


Fig. 5.

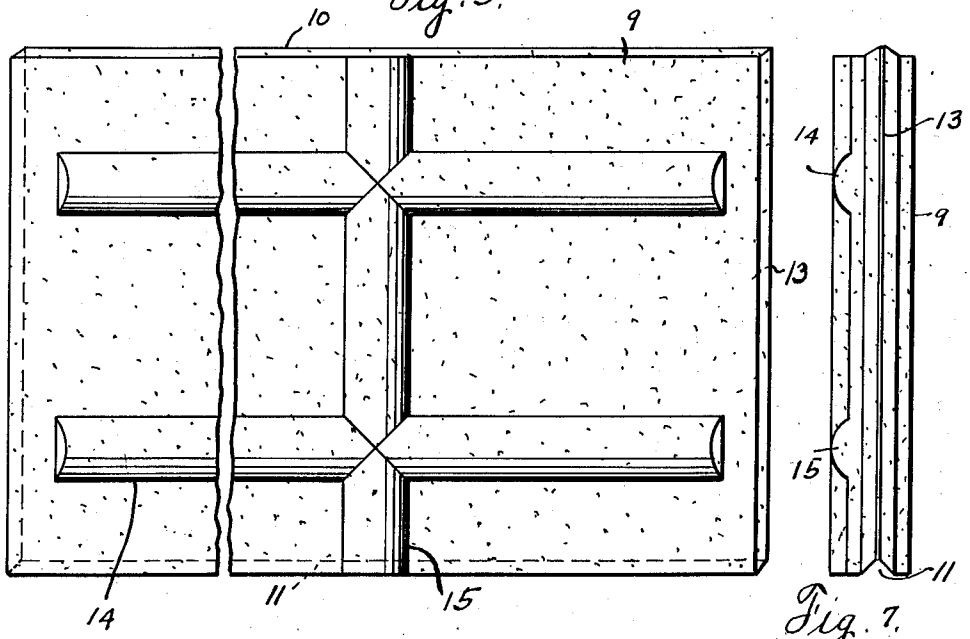


Fig. 6.

Fig. 7.

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CONCRETE CONSTRUCTION

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Application April 21, 1936, Serial No. 75,565

2 Claims. (Cl. 72—16)

This invention relates to concrete construction, and has particular relation to construction of the character described, specially designed for use in the erection of buildings.

An object of the invention is to provide specially designed units formed of concretious material and shaped to be fitted and anchored together in a novel manner as the units are erected into the building.

The invention comprehends novel type of wall studding designed to receive and support wall slabs which are anchored to the studding in a secure and novel manner.

With the above and other objects in view, the invention has particular relation to certain novel features of construction, arrangement of parts and use, an example of which is given in this specification and illustrated in the accompanying drawings, wherein:

Figure 1 shows a fragmentary top view of a wall constructed in accordance with the invention and illustrating in dotted lines the method of erecting the slabs.

Figure 2 shows a fragmentary side elevation of a wall constructed in accordance with the invention.

Figure 3 shows a vertical sectional view taken on the line 3—3 of Figure 2.

Figure 4 shows an enlarged fragmentary cross sectional view of the wall taken on the line 4—4 of Figure 2.

Figure 5 shows an enlarged fragmentary cross sectional view taken on the line 5—5 of Figure 2.

Figure 6 shows an inside elevational view of the wall slab, and

Figure 7 shows an end elevation thereof.

Referring now more particularly to the drawings wherein like numerals of reference designate similar parts in each of the figures, the numeral 1 designates a suitable foundation preferably concrete and the upper side of whose outer margin has a counter sunk seat 2 to receive the lower margins of the lower tier of wall slabs hereinafter referred to.

Supported on the foundation and suitably anchored thereto in the required spaced relation are the upright studding 3 also formed of concretious material. The upright corner studding 3*a* is of approximately triangular cross sectional contour as illustrated in Figure 1. Each wall studding, on each side, has a vertical outwardly facing shoulder 4 extending from end to end thereof. Out beyond the corresponding shoulders 4, 4 each studding has, in each side thereof, a V-shaped groove 5 extending from the upper to the lower end thereof the outer and inner margins of the studding 3 present the outer and inner flat faces 6, 7, the former of which is approximately flush with the outer surface of the completed wall and to the latter of which the inside wall 8 may be secured in any approved manner. The inner faces 7*a*, 7*a* of the corner studding 3*a* are aligned with the corresponding faces 7 and the outer side of the studding 3*a* may be given any desired shape, being shown curved in Figure 1. The outer wall is constructed of wall slabs 9 also formed of concretious material. The upper margin of each wall slab is formed with a longitudinal rib 10, from end to end thereof and preferably V-shaped in cross section, excepting the upper margin of the slabs of the top tier, which are formed smooth as shown in Figure 2. The lower margin of each slab is formed with a longitudinal V-shaped groove 11 extending from end to end of the slab and shaped to fit in to the groove of the slab above.

One end of each wall slab is formed with a vertical V-shaped groove 12, and the other end thereof is formed with a vertical V-shaped rib 13, said groove and rib extending the full width of the slab. The inner side of each slab has the longitudinal ribs 14, and the vertical ribs 15, cast integrally therewith to reinforce the slabs.

In erecting a vertical tier of wall slabs the grooves 12 and ribs 13 of adjacent slabs are staggered, that is, the rib 13 at one end of the slab will be arranged at the end opposite said rib of the adjacent slab above or beneath and the grooves 12 will be correspondingly alternated. This is illustrated more accurately in dotted lines in Figure 1.

In erection the groove 5, to receive the rib 13 as well as the adjacent face of the studding on each side of said groove 5, will be coated with pure cement as 16 and the corresponding ribbed end of the slab 9 will then be inserted in place and its other end then swung around carrying the grooved end of the slab into abutting relation with the corresponding shoulder 4, thus registering the groove 12 with the opposing groove 5, and the slab is then slightly lowered to seat the rib 10 beneath into the groove 11 of the slab above. The space inclosed in the grooves 5, 12, will then be filled with pure cement 17 as illustrated more accurately in Figures 4 and 5. Erection of the wall as above indicated is proceeded with until completed and when the cement 16, 17 sets the wall slabs will be firmly anchored in place. The studding may be reinforced by suitable reinforcing rods 18, 18 which are embedded therein.

Tie rods 19 are anchored to and upstand from the upper ends of the studding as shown to provide convenient means for securing the super structure on to the erected walls.

The lower margin of the lower tier of wall slabs will be seated on the seat 2 of the foundation as illustrated in Figure 3.

The drawings and description disclose what is now considered to be a preferred form of the invention by way of illustration only, while the broad principle of the invention will be defined by the appended claims.

What I claim is:—

1. A construction of the character described comprising a foundation, spaced studding upstanding therefrom, outwardly facing abutments on each side of the studding; the studding having vertical grooves outwardly from the abutments, wall slabs fitted against the abutments and forming an outer wall and having ribs at one end to fit into the groove of one studding and grooves at the other end to register with the groove of the other studding, said slabs having longitudinal ribs at one margin and correspondingly shaped marginal grooves at the other margin the studding being reduced in thickness and extending inwardly beyond the outer wall and having their inner margins formed with flat aligned faces against which an inner wall may be secured in spaced relation to the outer wall.

2. Concrete construction comprising a foundation, spaced studding upstanding therefrom, a vertical, outwardly facing shoulder on each side of the studding, the studding having vertical grooves outwardly from the shoulders, wall slabs fitted against the shouders and forming an outer wall and having ribs at one end to fit into the groove of one studding and grooves at the other end to register with the groove of the other studding, the inner faces of said slabs having horizontal and longitudinal reinforcing ribs said studding extending inwardly beyond the wall slabs and having aligned, flat faces against which the inner wall may be secured in spaced relation to the outer wall.

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