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DISMEMBERABLE ANCHORING DEVICE FOR REMOVABLE WALLS

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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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DISMEMBERABLE ANCHORING DEVICE FOR REMOVABLE WALLS

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11 Claims

ABSTRACT OF THE DISCLOSURE

A dismemberable device is disclosed for anchoring a removable, bottom-recessed wall to a base. The device comprises three elongated, parallely juxtaposed members which mutually opposing lateral surfaces are abutted and adhesively bonded to one another, to form a unitary strip which is capable of being quickly assembled and means on the two relatively outside strip members whereby the recessed bottom of the wall can be jam locked onto the strip from above, yet the intermediate of the three strip members can be relatively longitudinally displaced from between the outside members when the wall is to be removed.

FIELD OF THE INVENTION

This invention relates to removable walls and/or buildings, and in particular to a dismemberable device for anchoring a removable, bottom-recessed wall to a base.

BACKGROUND OF THE INVENTION INCLUDING CERTAIN OBJECTS THEREOF

Farmers and the like who employ migrant labor, and organizations such as the military which have reason to shift their personnel a great deal, are constantly seeking lower cost temporary housing which can be quickly erected at and/or removed from a site. One object of the present invention is to provide a wall and/or building construction which can be readily assembled and disassembled, and quickly and easily transported from one site to another. Another object is to provide a readily removable wall and/or building construction of this nature which employs a dismemberable device for anchoring the wall to a base therebelow. Still another object is to provide a wall and/or building construction of this nature in which the anchoring device can be employed with a removable, bottom-recessed wall construction such as that disclosed in the copending application of Virgil E. Spratt, Ser. No. 816,896, entitled Removable Multi-Paneled Wall Construction, and filed on even date herewith. Other objects include the provision of a wall and/or building construction of this nature wherein the anchoring device is constructed from several cheaply fabricated members which can be quickly assembled and employed with one another; and can serve as stiffeners along the top and/or bottom of a multi-paneled wall construction such as that disclosed in the aforementioned copending application of Virgil E. Spratt. Still other objects will become apparent from the description of the invention which follows hereafter.

SUMMARY OF THE INVENTION

These objects and advantages are realized by a dismemberable anchoring device of our invention which comprises three elongated, parallely juxtaposed members whose mutually opposing lateral surfaces are abutted and temporarily adhesively bonded to one another, to form a unitary strip which is anchorable to a base. The strip is employed with a bottom recessed, that is, edge-recessed wall, and the device further comprises means on the two relatively outside strip members whereby the recessed bottom of the wall can be jam locked onto the strip from above, yet the intermediate of the three strips can be relatively longitudinally displaced from between the outside members when the wall is to be removed. In the preferred form of the invention, the cross section of the strip is generally trapezoidal in outline, and the exposed side walls of the outside strip members are separated in the longitudinal direction thereof, so that the strip can cooperate with the bottom-recessed panels disclosed in the aforementioned Spratt application. Moreover, one of the outside strip members is wider than the other, and has a pair of holes therein for anchoring the strip to the base. The surfaces of the outside strip members which abut the intermediate member, are longitudinally V-grooved, and the intermediate member is complementarily prismatically shaped in cross section.

In use, the strip is placed on the base, and the wider outside member is anchored thereto. Then the recessed bottom edge of the wall is jam locked onto the strip as the wall is erected upright on the base. Preferably, the non-secured members of the strip are of lesser length than that of the wall to facilitate the dismemberment of the strip; and moreover, where the wall comprises two or more discrete bottom-recessed panels which are serially interconnected with one another at a vertical joint therebetween, as in the case of the aforementioned Spratt application, then the non-secured members of the strip are placed in conjunction with the secured member, to coincide in a medial sense with the joint, so that the strip also serves as a stiffener between the panels.

Although the members need not be adhesively bonded to one another, they nevertheless can be handled, placed and jammed more easily when they are so bonded to form a unitary strip. Moreover, given a sufficient force, the bond does not prevent the intermediate member from being relatively displaced or dislodged from between the outside members in the dismemberment operation.

BRIEF DESCRIPTION OF THE DRAWINGS

These features and advantages will be better understood by reference to the accompanying drawing which illustrates a preferred embodiment of the invention.

In the drawings:

FIG. 1 is an exploded part perspective view of a removable wall construction comprising a plurality of bottom-recessed panels which are interlocked with one another and anchored to a concrete base therebelow;

FIG. 2 is an exploded vertical cross sectional view of a dismemberable device for anchoring the panels to the base, at each of the vertical joints therebetween;

FIG. 3 is a part schematic, vertical cross sectional view of one such anchoring device as it is employed in the wall construction of FIG. 1; and

FIG. 4 is a partly cross-sectional, part side elevational view of the wall construction in FIG. 1, illustrating one way in which the anchoring devices may be dismembered in order to disassemble the wall.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, it will be seen that the wall construction 2 in FIG. 1 comprises a plurality of rectangularly shaped 4 x 8 foot panels 4 which are longitudinally upstanding on, and anchored to a concrete foundation slab 6 laid therebelow, and serially interlocked with one another in the horizontal direction of the wall. The anchoring means comprises a number of one-foot-long sill strips 10 which are spaced apart along the length of the wall to coincide in a medial sense with the joints 12 between the panels 4. The sill strips 10 cooperate with a
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framing structure 14 in the panels to interlock the panels to the slab, and in addition, this same framing structure enables the panels to be interlocked with one another, as described in the aforementioned copending application of Virgil E. Spratt.

Each of the sill strips 10 has a three piece longitudinal construction which is trapezoidal in cross section and characterized with serrated side walls 16 thereon. The three pieces in each strip comprise a pair of longitudinally V-grooved outside members 18, and a complementarily, prismatically-shaped intermediate member 20 which is disposed between the outside members. One of the outside members 18 is considerably wider than the other 18', and has a pair of vertical holes 22 therein which are spaced apart in the end portions of the member and counterbored from the upper side thereof. In addition, a sealant groove 24 extends the full length of the wider member 18' in the bottom side thereof.

In use, the three members of the strips 10 are adherently bonded to one another, and the strips rigidly spiked to the concrete slab 6 by pairs of T-nails or spikes 26 which are driven downwardly into and flush with the counterbored holes 22 therein. The operation may be effected by one of the hydraulic or air driven spiking "guns" now available on the market. At the same time, an elastomeric sealant 28 may be applied between the abutting faces of the concrete and the strips, along the line of the grooves 24, to effect a water-tight seal between the slab and each of the strips. In any case, when the strips 10 are in place, the panels 4 of the wall are jammed onto the strips and interlocked with one another at the vertical joints therebetween, following the method described in the aforementioned copending application of Virgil E. Spratt. Referring first to that application and then to FIG. 3 herein, it will be seen that the framing structure 14 of each panel 4 comprises sills 30 and crossrails 32 of a universal framing material 34 which is convex-concave in cross section and characterized with a serrated, trapezoidally recessed female face 36 that mates over the sill strips 10. Thus, when the panels are interengaged on the strips 10, the three members 18, 18' and 20 in each strip are tightly clamped between the side walls 34' of the bottom rails 32' in the panels; and the temporary adhesive bond between the members is supplemented by the serrate mechanical action of the rails 32'.

However, the combined clamping and bonding effect is not such as to prevent the strips from being dismembered in the manner illustrated in FIG. 4. Referring first to the left-hand side of the figure, it will be seen that starting at one end of the wall, a plain, thin, flat elongated bar 38 is employed to drive the intermediate member 20 endwise out of each strip under the first panel. Then a round hooked bar 40 is inserted through the channel-like opening 42 (FIG. 3) formerly occupied by the intermediate member in each strip, and the narrower outside member 18' of each strip is hooked and forcibly dislodged in the longitudinal direction from the wider member 18', so that the panel can be readily lifted away from the dismembered strips. The process is carried to the next panel, and then to the next, and so on down the length of the wall until each panel is removed. In FIG. 4, however, the hooking step is illustrated from the right side of the figure in order to simplify the drawing.

What is claimed is:

1. A dismemberable device for anchoring a removable, bottom-recessed wall to a base, comprising three elongated, parallelly juxtaposed members whose mutually opposing lateral surfaces are abutted and adhesively bonded to one another, to form a unitary strip which is anchorable to the base, and means on the two relatively outside strip members whereby the recessed bottom of the wall can be jam locked onto the strip from above, yet the intermediate of the three strip members can be relatively longitudinally displaced from between the outside members when the wall is to be removed.

2. The dismemberable anchoring device according to claim 1 wherein the cross section of the strip is generally trapezoidal in outline, and the exposed side walls of the outside strip members are serrated in the longitudinal direction thereof.

3. The dismemberable anchoring device according to claim 1 wherein one of the outside strip members is wider than the other, and has a pair of holes therein for anchoring the strip to the base.

4. The dismemberable anchoring device according to claim 1 wherein the surfaces of the outside strip members which abut the intermediate member, are longitudinally V-grooved, and the intermediate member is complementarily prismatically shaped in cross section.

5. In combination, a base, a wall which is upstanding on the base and has a longitudinally extending recess in the bottom edge thereof, and a dismemberable device anchoring the wall to the base, comprising three elongated, parallelly juxtaposed members resting on the base and transversely abutted with one another in jam locked engagement within the recess of the wall.

6. The combination according to claim 5 wherein one of the relatively outside members is rigidly secured to the base, and the intermediate member is longitudinally displaceable from between the outside members.

7. The combination according to claim 5 wherein one of the members is rigidly secured to the base, and the other two members are individually longitudinally displaceable in relation thereto.

8. The combination according to claim 7 wherein the two non-secured members are of lesser length than that of the wall.

9. The combination according to claim 8 wherein the wall comprises a pair of discrete bottom-recessed panels which are serially interconnected with one another at a vertical joint therebetween, and the anchoring device coincides in a medial sense with the joint.

10. The combination according to claim 9 wherein the members are adhesively bonded to one another.

11. The combination according to claim 10 wherein the three members have a generally trapezoidal outline in the abutted condition thereof, and the exposed side walls of the relatively outside members are serrated in the longitudinal direction thereof.

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