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#### (54) HOARDINGS

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> Correspondence Address: **CARTER WHITE** HOWREY SIMON ARNOLD AND WHITE LLP 750 BERING DRIVE **HOUSTON, TX 77057 (US)**

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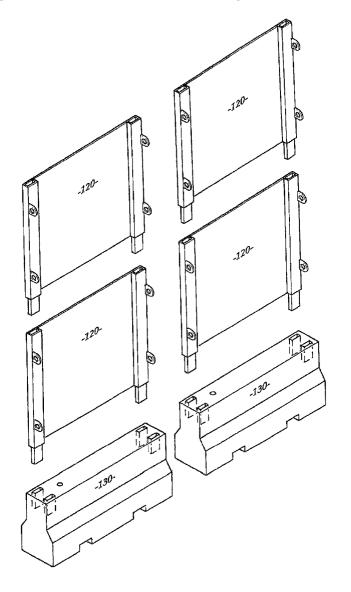
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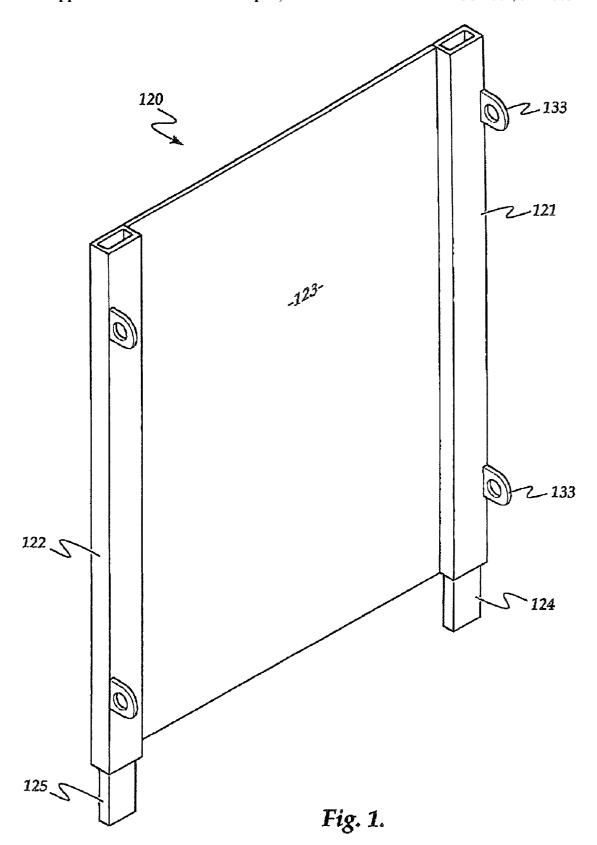
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#### (57) ABSTRACT

A hoarding module 100 is disclosed which cooperates with other modules for erecting a hoarding and includes a substantially rectangular panel member 101 and positioning means in the form of a sleeve set 69, 70 and sleeve 71 which positions the module to adjoin at least one other module along at least one vertical side thereof. Positioning means 69, 70 and 71 cooperate with joining means in the form of pins 80 to hinge together horizontally adjoining modules in a hoarding.





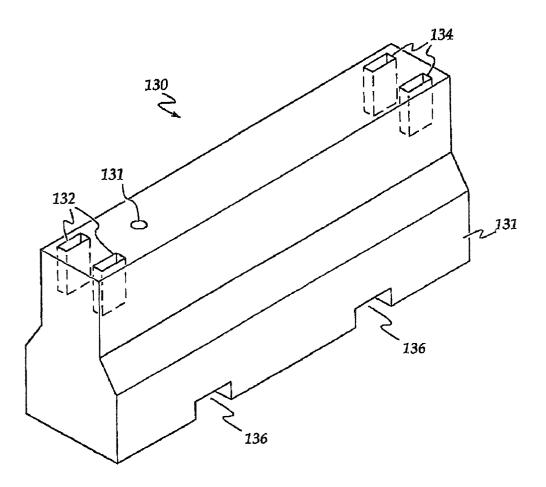
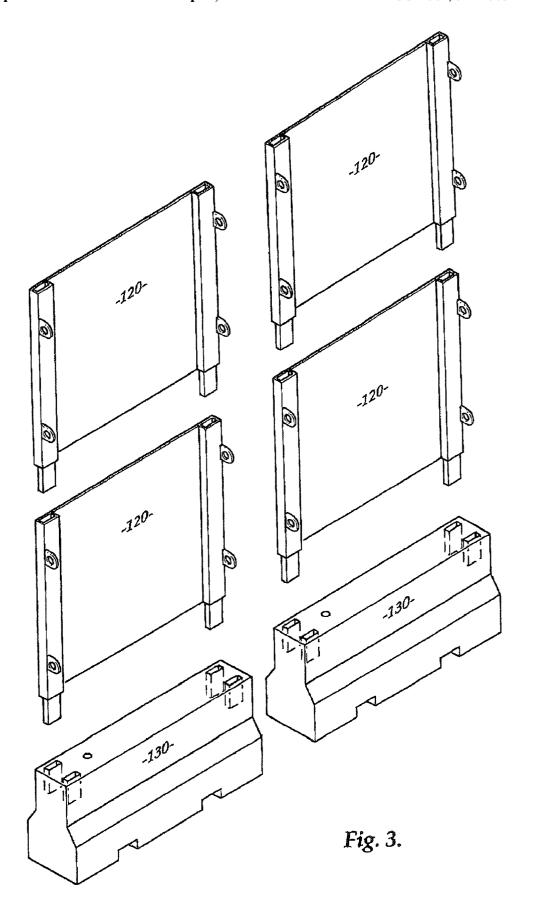


Fig. 2.



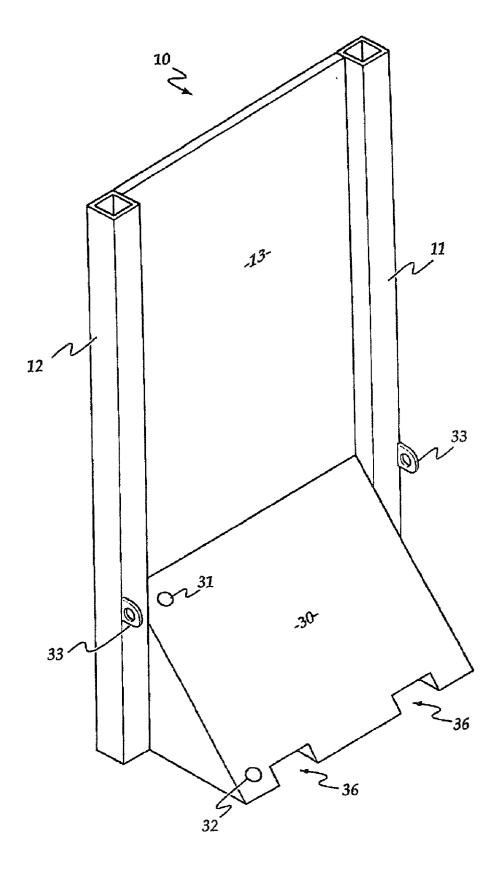
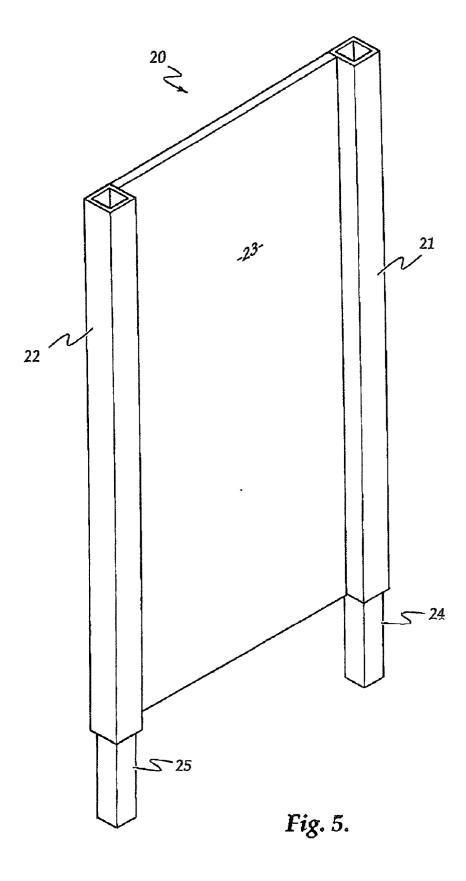
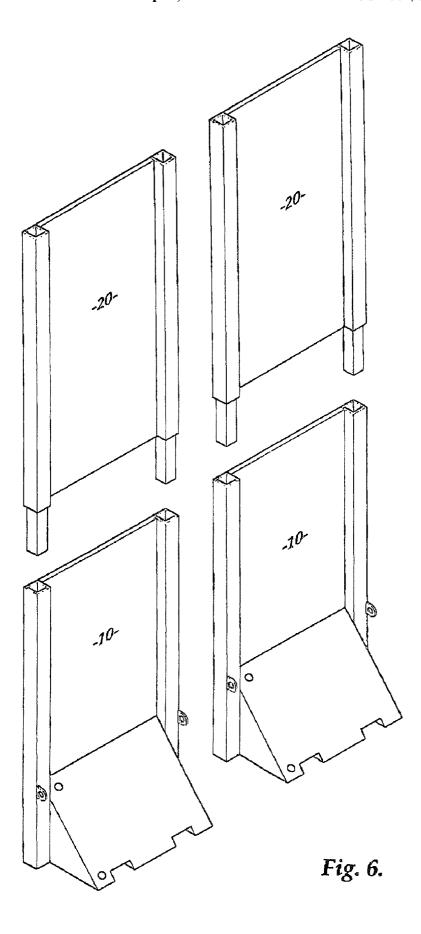
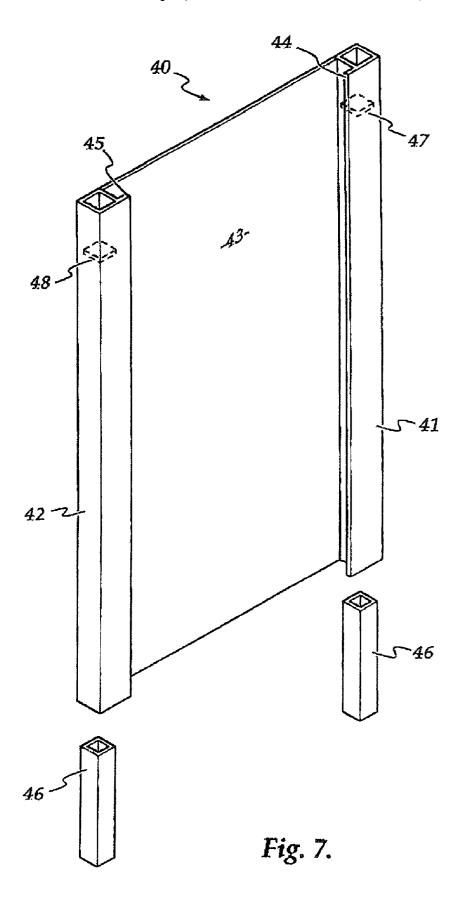


Fig. 4.







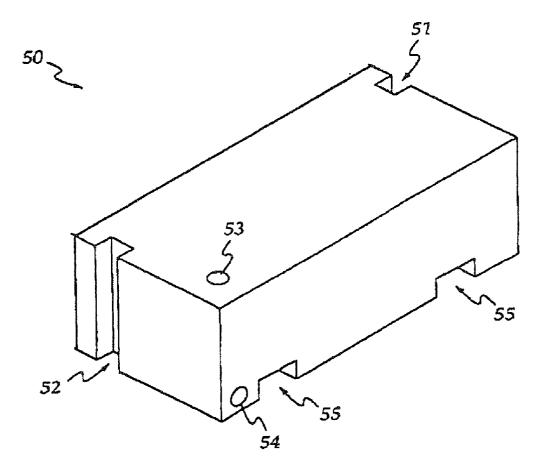
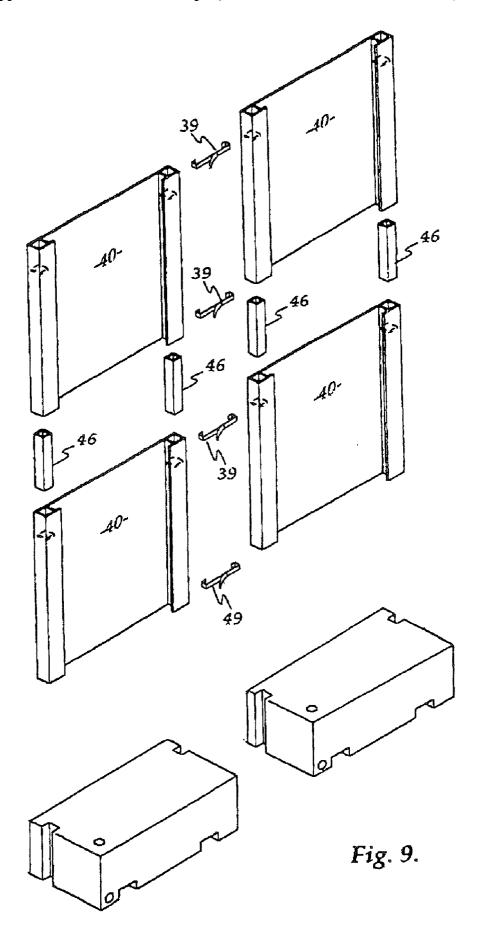
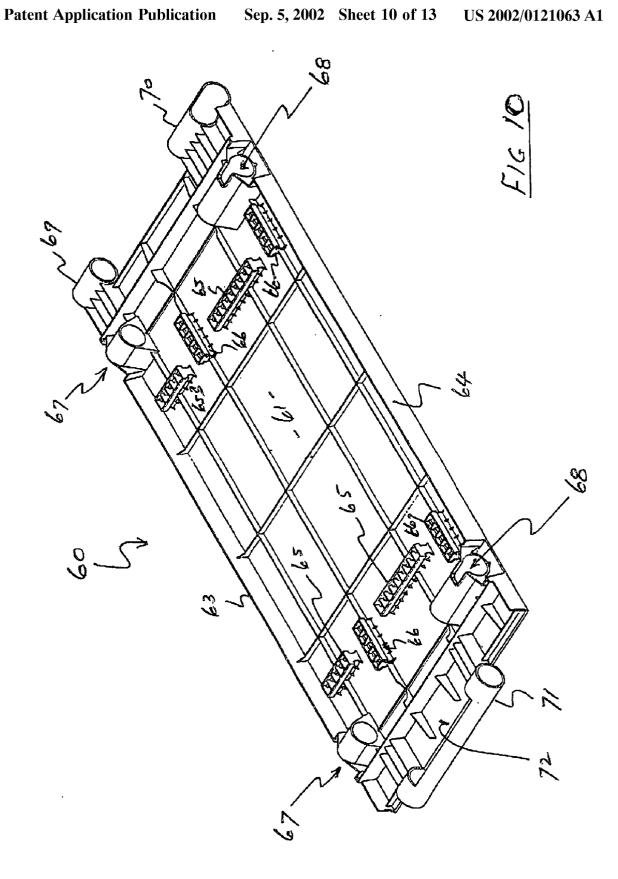
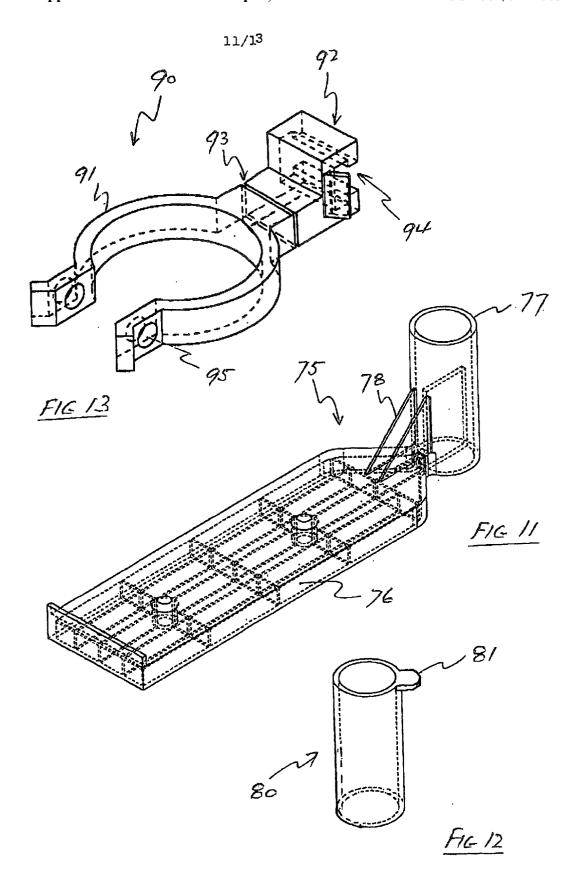
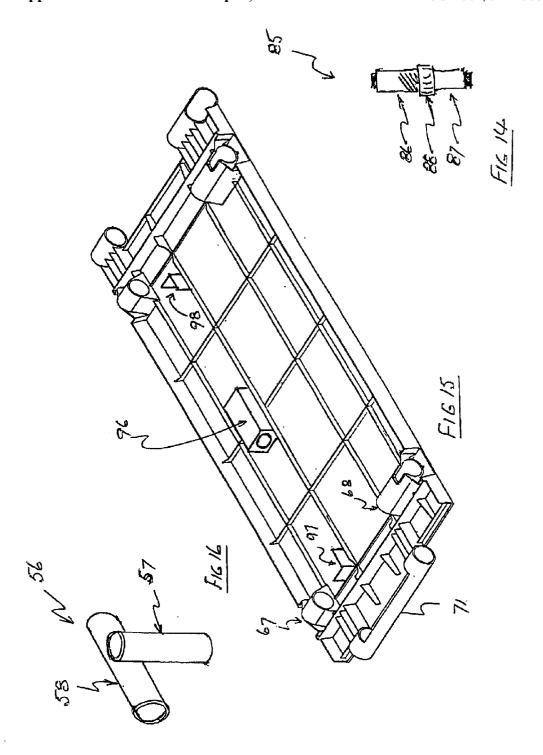


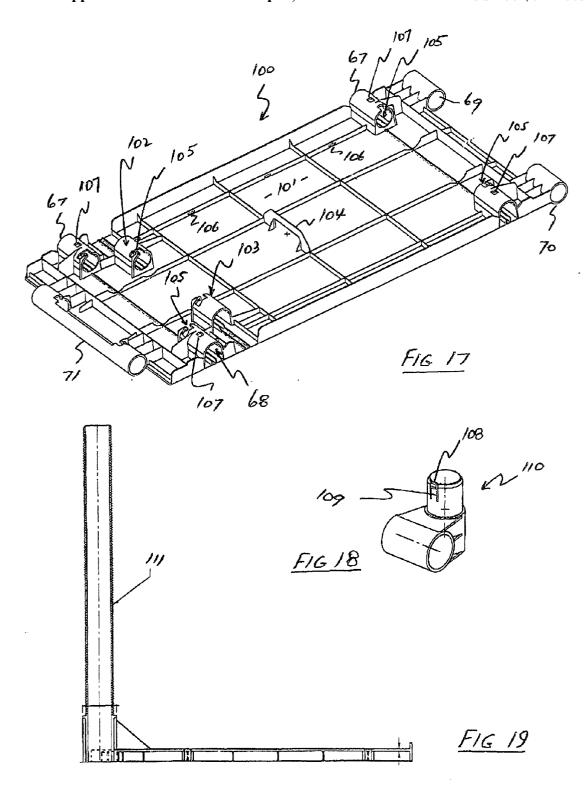
Fig. 8.











#### HOARDINGS

#### TECHNICAL FIELD

[0001] This invention relates to hoardings.

[0002] The invention has particular but not exclusive application to hoarding modules which are cooperable with other modules for erecting a hoarding, to walling assemblies for erecting a hoarding and to methods of erecting hoardings such as for example may be used as a temporary shop hoarding for use during shopping centre renovations.

[0003] However it will be realised that the invention has wide implications and could be used for temporary, semi-permanent and permanent walling for use in a wide range of applications including, inter alia, partitioning (both indoor and outdoor), construction sites, concert and stage settings, trade shoes, crowd control etc.

#### BACKGROUND OF INVENTION

[0004] Pre-fabricated walling systems are well known and it is known to fabricate temporary shop hoardings on-site.

#### SUMMARY OF INVENTION

[0005] The present invention aims to provide an alternative to known walling systems and hoardings.

[0006] This invention in one aspect resides broadly in a hoarding module cooperable with other modules for erecting a hoarding, the module inducing:

[0007] a substantially rectangular panel member;

[0008] first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the substantially rectangular panel member, and

[0009] second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the substantially rectangular panel member;

[0010] wherein the second positioning means cooperates with joining means to hinge together adjoining modules in a hoarding.

[0011] It is preferred that the first positioning means includes two pairs of opposed first receiving means positioned adjacent the first pair of opposite sides at substantially opposite ends thereof, the first receiving means receiving joining means and cooperating therewith to join hoarding modules adjoining on the first pair of opposite sides.

[0012] It is also preferred that the second positioning means includes:

[0013] a pair of opposed second receiving means positioned adjacent the first pair of opposite sides along one of the other pair of opposite sides, and

[0014] third receiving means positioned along the other of the other pair of opposite sides and receivable between a pair of opposed second receiving means of a hoarding module adjoining on one side of the other pair of opposite sides;

[0015] the second and third receiving means receiving joining means and cooperating therewith to join hoarding modules adjoining on the other pair of opposite sides.

[0016] It is also preferred that the first receiving means includes a first set of sleeves extending parallel to the other pair of opposite sides, the second receiving means includes a second set of sleeves parallel to the first set and extending along one of the other pair of opposite sides, and the third receiving means includes a third sleeve parallel to the first set and extending along the other of the other pair of opposite sides; wherein the joining means includes cylindrical pins closely receivable within the sets of sleeves, and wherein the second set of sleeves on one module cooperates with the third sleeve on an adjoining module and with a cylindrical pin to hinge together the adjoining modules along respective sides thereof.

[0017] It is also preferred that the third receiving means is receivable between a pair of opposed first receiving means of a hoarding module in abutment thereto, the first and third receiving means receiving joining means and cooperating therewith whereby a plurality of vertically aligned modules brace a hoarding comprising a plurality of joined modules in abutment thereto.

[0018] It is preferred that the hoarding module includes fourth receiving means in the form of a fourth set of sleeves inset respectively from the first pair of opposite sides which cooperate with the second set of sleeves, the second and fourth set of sleeves receiving joining means and cooperating therewith whereby a plurality of vertically aligned modules brace a hoarding comprising a plurality of joined modules in abutment thereto.

[0019] It is preferred that the fourth receiving means cooperate with anchor means for non-fixedly anchoring the module to a supporting surface.

[0020] As used herein the expression "non-fixedly anchoring" is to be given a broad meaning which includes all means for anchoring a hoarding module to a floor or the like not involving fixing per se. The expression "fixing" in this sense is to considered as including screwing, nail-gunning and gluing for example, but is not to be considered as including weighting or frictional engagement.

[0021] It is preferred that the hoarding module includes fixing means which fix the module to scaffolding or the like.

[0022] It is preferred that the fixing means includes a plurality of supports supporting mounts attachable to the scaffolding.

[0023] It is preferred that the first positioning means cooperates with joining means to brace vertically adjoining modules in a hoarding.

[0024] It is also preferred that the first positioning means cooperates with anchor means for anchoring the braced vertically adjoining modules to a floor or the like.

[0025] In another aspect this invention resides broadly in a hoarding module cooperable with other modules for erecting a hoarding, the module including:

[0026] a substantially rectangular panel member;

[0027] first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the substantially rectangular panel member, and

[0028] second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the substantially rectangular panel member;

[0029] wherein the first positioning means cooperates with joining means to brace vertically adjoining modules in a hoarding.

[0030] In another aspect this invention resides broadly in a walling assembly for erecting a hoarding or the like, the walling assembly including:

[0031] a plurality of substantially rectangular hoarding modules, and

[0032] anchor means for non-fixedly anchoring a hoarding module to a floor or the like;

[0033] the hoarding modules including first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the hoarding module and second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the hoarding module;

[0034] and joining means cooperating with the second positioning means to hinge together horizontally adjoining modules in a hoarding and cooperating with the first positioning means to join vertically adjoining hoarding modules.

[0035] It is preferred that the first positioning means includes a first set of sleeves extending parallel to the other pair of opposite sides and the second positioning means includes a second set of sleeves parallel to the first set and extending along the other pair of opposite sides.

[0036] It is also preferred that the joining means includes cylindrical pins closely receivable within the sets of sleeves.

[0037] It is also preferred that the some of the sleeves in the second set of sleeves on one module cooperates with other sleeves in the second set of sleeves on an adjoining module and with a cylindrical pin to hinge together the adjoining modules along respective sides thereof.

[0038] It is also preferred that the modules include door and/or window means.

[0039] It is preferred that the modules are made from a plastics material,

[0040] In another aspect this invention resides broadly in a method of erecting a hoarding, the method including:

[0041] positioning anchoring means in place on a floor or the like;

[0042] locating on the anchoring means a first substantially rectangular hoarding module having first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the hoarding module and second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the hoarding module;

[0043] positioning a second module substantially identical to the first module along the upper side of the first module;

[0044] positioning a third module substantially identical to the first module along one of the vertical sides of the first module;

[0045] and joining adjoining modules by joining means cooperating with the positioning means on each module, the second positioning means on the first and third modules cooperating with joining means to hinge together the first and third modules in the hoarding.

[0046] In alternative embodiments to that defined above it is preferred that the first positioning means includes structural members extending along opposite sides thereof which receive the joining means. Preferably the structural members are box-shaped. It is also preferred that the structural members extend along the sides of the modules which are vertical in use.

[0047] In these embodiments it is preferred that the joining means include spigot means to join vertically adjoining modules. Preferably the spigot means are fixed in the lower ends of the box-shaped members of upper modules and are closely receivable in the upper ends of the box-shaped members of lower modules. Alternatively, the spigot means may be closely receivable in the lower ends of the box-shaped members of upper modules and in the upper ends of the box-shaped members of lower modules, the upper ends including retaining means for retaining the spigot means therein.

[0048] In these embodiments it is preferred that the second positioning means include attachment means for attaching together horizontally adjoining modules. The attachment means may include lugs to be bolted together. Alternatively the attachment means may include clamp means for clamping together horizontally adjoining box-shaped members.

[0049] It is preferred that the anchor means non-fixedly anchor a module to the floor. It is also preferred that the anchor means includes weighting means. In one embodiment the weighting means is preferably a container for water or the like. In this embodiment it is preferred that the weighting means engages a module for anchoring the module to the floor. It is preferred that the weighting means includes recesses for receiving respective portions of the module therein whereby the modules are supported by the weighting means. The portions of the modules may be the spigot means. Alternatively the portions of the modules can be inwardly directed flanges on the opposed box-shaped members, the flanges being engaged by the clamp means when clamping together horizontally adjoining box-shaped members.

## DESCRIPTION OF DRAWINGS

[0050] In order that this invention may be more easily understood and put into practical effect, reference will now

be made to the accompanying drawings which illustrate a preferred embodiment of the invention, wherein:

[0051] FIG. 1 is a rear perspective view of a universal module for use in a first embodiment of the invention;

[0052] FIG. 2 is a perspective view of an anchor for use with the universal module seen in FIG. 1;

[0053] FIG. 3 is an exploded rear perspective view of a walling constructed from the modules and anchors of FIGS. 1 and 2;

[0054] FIG. 4 is a rear perspective view of a base module for use in another embodiment of the invention;

[0055] FIG. 5 is a rear perspective view of an upper module for use with the base module seen in FIG. 4;

[0056] FIG. 6 is an exploded rear perspective view of a walling constructed from the modules of FIGS. 4 and 5;

[0057] FIG. 7 is a rear perspective view of a universal module for use in a further embodiment of the invention;

[0058] FIG. 8 is a perspective view of an anchor for use with the universal module seen in FIG. 7;

[0059] FIG. 9 is an exploded rear perspective view of a walling constructed from the modules and anchors of FIGS. 7 and 8;

[0060] FIG. 10 is a rear perspective view of a universal module for use in a preferred embodiment of the invention;

[0061] FIG. 11 is a perspective view of an anchor for use with the universal module seen in FIG. 10;

[0062] FIG. 12 is a perspective view of a pin for coupling adjoining modules;

[0063] FIG. 13 is a perspective view of a scaffold mount for bracing a hoarding erected from a number of the modules by mounting the modules to a scaffolding;

[0064] FIG. 14 illustrates a ceiling jack;

[0065] FIG. 15 is a rear perspective view of an alternative to the universal module illustrated in FIG. 10 showing an alternative scaffold mounting arrangement and showing a mounting arrangement for mounting an adjoining module about a horizontal axis;

[0066] FIG. 16 illustrates an alternative to the scaffold mount shown in FIG. 13;

[0067] FIG. 17 is a rear perspective view of another alternative to the universal modules illustrated in FIGS. 10 and 15, showing an additional sleeve set to allow either end of a second panel to be connected at the rear, another anchor mounting arrangement, and some other changes as will be subsequently described

[0068] FIG. 18 is an alternative scaffold mount to that shown in FIG. 16, and

[0069] FIG. 19 is an alternative to the anchor shown in FIG. 11.

# DESCRIPTION OF PREFERRED EMBODIMENT OF INVENTION

[0070] Reference will first be made to FIGS. 10 to 13 which illustrate a preferred embodiment of the walling

assembly in accordance with the present invention for mounting on a floor. In this embodiment the walling assembly includes a plurality of hoarding modules 60 and anchor means in the form of a foot 75 for anchoring lower modules 60 to the floor. In a manner to be described subsequently, anchor feet 75 can also anchor upper modules 60 to the ceiling.

[0071] Hoarding module 60 is made from a light weight resilient tough plastic such as PVC and is in the form of a rectangular panel 61 occupying a 600 mm vertical×1200 mm horizontal space when assembled. Panel 61 is reinforced by cross ribbing 62 in known manner and has reinforcing webs at the edges 63, 64 which in use will constitute the upper and lower sides respectively of module 60. For convenience the sides or edges 63, 64 will be called the horizontal edges of the module with the sides or edges, seen in FIG. 10 as having sleeve set 69, 70 and sleeve 71 respectively, will be referred to as the vertical edges of the module.

[0072] Two sets of sleeves 67, 68 having aligned longitudinally extending axes parallel to the vertical sides are located adjacent each vertical side edge of module 60 with the sleeves 67 extending substantially to the upper horizontal edge 63 and with the sleeves 68 extending substantially to the lower horizontal edge 64. Lower sleeves 68 have cut-out portions 72 to accommodate bracing gusset 78 of foot 75 (to be subsequently described with reference to FIG. 11).

[0073] Another set of sleeves 69, 70 is located at one of the vertical edges of module 60 and is similar to the sets 67, 68 with an aligned longitudinally extending axis parallel to the vertical sides. Sleeve set 69, 70 is positioned along the vertical side edge of module 60 with sleeve 69 extending substantially to the upper horizontal edge 63 and with the sleeve 70 extending substantially to the lower horizontal edge 64. Another sleeve 71 is located along the other vertical edge of module 60 and has a longitudinally extending axis parallel to the vertical side. Sleeve 71 is positioned along the other vertical side edge of module 60 such that when two modules 60 horizontally adjoin each other, sleeve 71 of one of the modules is received in the space between sleeves 69 and 70 on the other module, such that the longitudinal axes of the sleeves are in alignment and can receive a pin 80 (as subsequently to be described with reference to FIG. 12) to thus constitute a hinge joint hinging together two horizontally adjoining modules. Sleeve 71 has a cutout portion 72 to facilitate insertion of pin 80.

[0074] It will be appreciated that sleeve 71 similarly fits closely in the space between sleeve sets 67, 68 such that when a number of modules are connected together to form a hoarding in a manner subsequently to be explained, another module 60 (or a number of vertically connected modules) can abut the hoarding at right angles and be connected thereto via a sleeve set(s) 67, 68 by pins 80 and thus form a bracing for the hoarding.

[0075] Sleeve sets 67, 68 and 69, 70 and sleeve 71 are of similar internal diameter and closely receive pins 80 for connecting together adjoining modules.

[0076] Pins 80 are of two lengths to facilitate interconnection of the module illustrated in FIG. 10. A shorter pin extends upwardly from the upper end of cutout 72 to a point

approximately midway in sleeve 69 of the horizontally adjoining module. This shorter pin is retained in position by means of tab 81 (see FIG. 12). When pin 80 is rotated, tab 81 engages in a slot (not shown) in the upper portion of sleeve 71 above cutout 72. The longer pin 80 has a length slightly less than the length of cutout 72 in which it is inserted. It is located downwardly and extends from the lower lip of cutout 72 (on which tab 81 is arrested) downward through sleeve 70 of the horizontally adjoining module and down to a point approximately midway in sleeve 69 of the module vertically below the horizontally adjoining module

[0077] As can be seen in FIG. 11, an anchor 75 has a foot 76 and a cylindrical pin or leg 77 upstanding therefrom and braced thereto by bracing gusset 78. As can be seen in FIG. 12, cylindrical pin 80 has a tab or collar 81 at one end thereof for supporting the pin on the sleeves to prevent the pins falling through the sleeves under the influence of gravity. The external diameter of pins 80 is slightly less than the internal diameter of the sleeves so that the pins are closely received in the sleeves.

[0078] In use in this embodiment, the method of the present invention assembles a wall or hoarding by first positioning a pair of anchors 75 with feet 76 on the floor and legs 77 upstanding therefrom. A hoarding module 60 is then positioned over legs 77 with lower sleeves 68 being closely received over legs 77. Further pairs of anchors can be positioned on either side of the central module and further modules positioned over the legs in like manner. The horizontally adjoining modules are then connected to each other by aligning sleeves 71 within the space between respective sleeve sets 69, 70 and sliding a pin 80 therein to hingedly connect together the modules. A second vertical layer of adjoining modules can then be connected by placing further modules above the lower row with sleeve sets 67, 68 in alignment and sliding pins 80 therein to connect and brace the two rows of modules. Further rows and columns of modules can then be connected in like manner to construct a hoarding in a manner substantially as illustrated in **FIGS**. 3, 6 and 9 in relation to three other embodiments.

[0079] It should be noted that once the lowermost modules are located on feet 75, it is not necessary for sleeves 67, 68 to be used in connecting vertically adjoining modules which can be connected, by virtue of pins 80, by means of sleeve set 69, 70 and sleeve 71.

[0080] It will be appreciated that a weight such as a block of concrete or the like can be placed on foot 76 to support the hoarding. Alternatively, instead of using pins 80, a series of coupled steel posts (not shown) can be utilised with successive vertical rows of modules being fed over the posts, and with further posts being added as required. A line of the thus coupled posts forms an extendable stanchion, the two ends of which can be urged in known manner in opposite directions to bear against a floor and a ceiling, with the thus compressed stanchion supporting the hoarding.

[0081] Alternatively, a ceiling jack 85 as illustrated in FIG. 14 can be utilised. This consists of a pair of threaded telescopic pipes 86, 87 connected by a threaded clamping collar 88 which when rotated caused the pipes to longitudinally extend relative to each other. With the end of one pipe bearing on a sleeve (or on support 97 as seen in FIG. 15), rotation of clamping collar 88 causes the opposite end of the other pipe to bear against the ceiling.

[0082] Alternatively a hoarding assembled from a number of modules can be supported by or braced against a scaffolding by means of scaffold mount 90 seen in FIG. 13. Mount 90 has a collar portion 91 pivotally attached to module connector portion 92 by an articulated joint 93. Collar 91 can be clipped over scaffolding to which it is attached by pins (not shown) through apertures 95 in known manner. Module connector portion 92 has a splined keyway 94 which closely slides over T-shaped complimentary supports 65, 66 on module 60.

[0083] As seen in FIG. 10, two sets of vertically extending supports 65 and two sets of horizontally extending supports 66 are located adjacent sleeve sets 67, 68 towards each vertical edge of module 60. When a hoarding has been assembled as described above, a number of mounts 90 can be slid over respective ones of supports 65 and 66, with collars then being affixed to vertical and horizontal scaffolding members to support and brace the hoarding.

[0084] Another method of mounting the hoarding to a scaffolding is illustrated in FIG. 16 wherein mount 56 has a pair of orthogonal cylindrical sleeves 57, 58 with sleeve 57 being similarly sized to pin 80 and sleeve 58 having an internal diameter sufficient to closely receive a scaffolding pipe. Thus pin-sleeve 57 can be mounted in a lower sleeve 68 with sleeve 58 resting on the upper end of sleeve 68. When the hoarding is assembled a longitudinally extending length of scaffolding pipe or the like can be run through a number of sleeves 58 and be connected to a scaffolding in known manner to brace the hording horizontally.

[0085] The above arrangement in which a horizontal bar or pipe can be attached to a hoarding can be used to mount a sliding door or window in a hoarding in which a number of modules have been removed to create a doorway or window.

[0086] An arrangement for mounting an adjoining module about a horizontal axis is illustrated in FIG. 15 wherein a pair of angle supports or shelves 97, 98 are positioned in alignment with a sleeve 96. The distance between the outer vertically inclined arm of angle supports 97, 98 and the respective edges of sleeve 96 is such that sleeve 71 is closely received therein in the same manner as it is received between sleeves 67, 68. This enables a skirting-like or architrave-like extension of modules to be arranged at the lower or upper row of modules in a hoarding. This can be useful in providing a dust barrier and avoids the use of unsightly sarking.

[0087] It will also be appreciated that the uppermost row of modules can be cut to size so that a hoarding assembled from modules in accordance with the present invention is infinitely variable in height to fit existing floor to ceiling heights.

[0088] In this embodiment it will be apparent that hoarding module 60 cooperates with other modules for erecting a hoarding. Module 60 includes a substantially rectangular panel member 61; first positioning means in the form of a pair of sleeve sets 67, 68 which positions module 60 to adjoin at least one other module along at least one of the module's horizontal sides, and second positioning means in the form of a sleeve set 69, 70 and sleeve 71 which positions the module to adjoin at least one other module along at least one of the module's vertical sides. Module 60 cooperates

with anchor means 75 for non-fixedly anchoring module 60 to a floor. The first positioning means 67, 68 cooperates with joining means in the form of cylindrical pins 80 to brace vertically adjoining modules in a hoarding. The first positioning means 67, 68 also cooperates with anchor means 75 for anchoring the braced vertically adjoining modules to the floor. The second positioning means 69, 70 and 71 cooperates with joining means in the form of pins 80 to hinge together adjoining horizontal modules in a hoarding.

[0089] It will also be apparent that in this embodiment hoarding module 60, which cooperates with other modules for erecting a hoarding, includes a substantially rectangular hoarding module 61 and positioning means in the form of a sleeve set 69, 70 and sleeve 71 which positions the module to adjoin at least one other module along at least one vertical side thereof. Positioning means 69, 70 and 71 cooperate with joining means in the form of pins 80 to hinge together horizontally adjoining modules in a hoarding.

[0090] In the embodiment illustrated in FIG. 17 wherein like integers are numbered correspondingly to those described above, module 100 has a substantially rectangular panel member 101, first positioning means 67, 68 which positions the module to adjoin at least one other module along at least one of a first pair of opposite (horizontal) sides of the substantially rectangular panel member, and second positioning means in the form of a second set of sleeves 69, 70 and a third sleeve 71 which position the module to adjoin at least one other module along at least one of the other pair of opposite (vertical) sides of the substantially rectangular panel member. The second positioning means 69, 70, 71 cooperate with joining means (not shown in FIG. 17) to hinge together adjoining modules in a hoarding.

[0091] In this embodiment fourth receiving means in the form of a fourth set of sleeves 102, 103 are inset respectively from the first pair of opposite horizontal sides and cooperate with the second set of sleeves 69, 70. Sets of sleeves 102, 103 and 69, 70 receive joining means (not shown in FIG. 17) and cooperate therewith whereby a plurality of vertically aligned modules brace a hoarding comprising a plurality of joined modules in abutment thereto.

[0092] The anchor is received in sleeve 103, rather than in sleeve 68 as in the embodiments of FIGS. 10 and 15. Other variations in this embodiment are that sleeve 71 is centered in the end of the panel and sleeves 69, 70 at the end opposite to 71 are of equal length, a hand grip 105 is provided, sleeves 67, 68, 102 and 103 have been modified at 105 to allow the connecting pins to be locked in place, slots 106 allow cables to be fixed to the panels, and apertures 107 receive the barb 108 of resilient tongue 109 to lock in the T support brace 110 (see FIG. 18).

[0093] FIG. 19 illustrates an alternative anchor in which the foot is extended and carries a threaded shaft 111 to allow for panel height adjustment by adjustment of a nut (not shown).

[0094] It will be appreciated that the hoarding system can be constructed of modular panels connected to form a protective barrier to varying heights. Each modular panel attaches to the adjacent panel, forming a continuous barrier. Desired heights are achieved by stacking panels on top of each other, held together by male and female connector pins and sockets. Stability for each stacked, modular panel is

provided by water ballast within the base panel, by the weighted foot arrangement, by the expandable stanchion arrangement, by the ceiling jack arrangement, by the pin and sleeve arrangement or by the attachment to scaffolding.

[0095] As can be seen in FIGS. 1 to 3 which illustrate a first embodiment of the walling assembly in accordance with the present invention for mounting on a floor, the walling assembly includes a plurality of universal hoarding modules 120 and anchor means in the form of a water tank 130 for anchoring lower modules 120 on the floor.

[0096] The hoarding modules 120 have a substantially rectangular panel 123 and box-shaped structural members 121, 122 extending respectively along vertical opposite sides of panels 123. The structural members closely receive joining means in the form of spigots 124, 125 to join together vertically adjoining hoarding modules to form a wall.

[0097] Spigots 124, 125 are fixed in the lower ends of box-shaped members 121, 122 of hoarding modules 120 and are closely receivable in the upper ends of box-shaped members 121, 122 of a vertically adjoining hoarding modules

[0098] The joining means also includes attachment means in the form of lugs 133 for attaching together horizontally adjoining hoarding modules by bolts or pins (not shown).

[0099] The anchor means in the form of water container 130 seen in FIG. 2 is adapted to engage a hoarding module 120 for anchoring the hoarding module on the floor by support thereon and in the embodiment illustrated in FIGS. 1 to 3 is seen to include pairs of opposed vertically aligned recesses 132, 134 which serve the purpose of locating hoarding modules 120. Water container 130 has upper (131) and lower (not shown) filling and emptying screw caps. Recesses 136 are adapted to receive the forks of a forklift or pallet jack for transportation.

[0100] When assembled, water container 130 constitutes a base for the walling and is symmetrically shaped so its orientation during construction is not critical and does not affect the aesthetic appearance with skirting 131 being evident on both sides.

[0101] It will be appreciated that significant variations can be made to the configuration illustrated without departing from the invention. Thus the box-shaped sections may of different cross-sectional configuration to that illustrated, including square or rectangular or circular for example; the inner surfaces of the box-shaped sections can be castellated to provide greater structural rigidity and strength; the panel members 123 can be the same width as the box-shaped sections; the panel members 123 can include strengthening ribbing; the universal hoarding modules can be available in different heights and widths; the water containers 130 can include a centrally located pair of vertically aligned recesses such that the hoarding modules can straddle a pair of horizontally aligned water containers rather than as illustrated, being supported on one only.

[0102] In use, the method of the present invention assembles a wall or shop hoarding by first positioning anchoring means 130 in place on a floor. Typically the water container constituting the anchoring means is positioned by means of a forklift. A hoarding module 120 is then posi-

tioned on container 130 with spigots 124, 125 sliding in respective ones of recess pairs 134, 132. An upper hoarding module 120 is then fixed to the anchored lower hoarding module by lifting into position above the lower hoarding module and with spigots 124, 125 being received in the upper ends of box-shaped members 121, 122 of the lower hoarding module.

[0103] A similar operation is then followed to assemble a horizontally adjoining wall assembly. The two horizontally adjoining wall assemblies are then joined together by means of bolting or pinning.

[0104] In this embodiment it will be apparent that hoarding module 120 cooperates with other modules for erecting a hoarding. Module 120 includes a substantially rectangular panel member 123; first positioning means in the form of box-shaped members 121, 122 which positions module 120 to adjoin at least one other module along at least one of the module's horizontal sides, and second positioning means in the form of lugs 133 which positions the module to adjoin at least one other module along at least one of the module's vertical sides. Module 120 cooperates with anchor means 130 for non-fixedly anchoring module 120 to a floor. The first positioning means 121, 122 cooperates with joining means in the form of spigots 124, 125 to brace vertically adjoining modules in a hoarding. The first positioning means 121, 122 also cooperates with anchor means 130 for anchoring the braced vertically adjoining modules to the floor.

[0105] As can be seen in FIGS. 4 to 6, in another embodiment of the invention the walling assembly includes a plurality of lower hoarding modules 10 and upper hoarding modules 20 and anchor means in the form of a water tank 30 for anchoring lower modules 10 to the floor.

[0106] The hoarding modules 10, 20 have substantially rectangular panels 13, 23 and include box-shaped structural members 11, 12 and 21, 22 extending respectively along vertical opposite sides of panels 13, 23. The structural members closely receive joining means in the form of spigots 24, 25 (see FIG. 5) to join together vertically adjoining hoarding modules to form a wall.

[0107] Spigots 24, 25 are fixed in the lower ends of box-shaped members 21, 22 of upper hoarding modules 20 and are closely receivable in the upper ends of box-shaped members 11, 12 of lower hoarding modules 10.

[0108] The joining means also includes attachment means in the form of lugs 33 for attaching together horizontally adjoining hoarding modules by bolts 34.

[0109] The anchor means in the form of water container 30 is adapted to engage hoarding module 10 for anchoring the hoarding module to the floor and in the embodiment illustrated in FIGS. 4 to 6 is seen to be fixed to the lower portion of panel 10. Water container 10 has upper and lower filling and emptying screw caps 31 and 32. Recesses 36 are adapted to receive the forks of a forklift for transportation and pallet jack. In this embodiment the lower edge of panel 10 has cutouts for receiving the forklift forks therethrough when an assembled wall is lifted from the front.

[0110] In this embodiment it will be apparent that hoarding module 10 cooperates with other modules for erecting a hoarding. Module 10 includes a substantially rectangular panel member 13; first positioning means in the form of

box-shaped members 11, 12 which positions module 10 to adjoin at least one other module along at least one of the module's horizontal sides, and second positioning means in the form of lugs 33 which positions the module to adjoin at least one other module along at least one of the module's vertical sides. Module 10 cooperates with anchor means 30 for non-fixedly anchoring module 10 to a floor. The first positioning means 11, 12 cooperates with joining means in the form of spigots 24, 25 to brace vertically adjoining modules in a hoarding. The first positioning means 11, 12 also cooperates with anchor means 30 for anchoring the braced vertically adjoining modules to the floor.

[0111] FIGS. 7 to 9 illustrate another embodiment of the walling assembly in accordance with the present invention for mounting on a floor. In this embodiment the walling assembly includes a plurality of hoarding modules 40 and anchor means in the form of a water tank 50 for anchoring lower modules 40 to the floor.

[0112] The hoarding modules 40 have a substantially rectangular panel 43 and box-shaped structural members 41, 42 extending respectively along vertical opposite sides of panels 43. The structural members closely receive joining means in the form of spigots 46 (see FIG. 9) to join together vertically adjoining hoarding modules to form a wall.

[0113] Spigots 46 are closely received in the lower ends of the box-shaped members 41, 42 of upper hoarding modules and in the upper ends of the box-shaped members 41, 42 of lower hoarding modules. The upper ends of the box-shaped members 41, 42 have retaining means in the form of plates 47, 48 within the box-shaped members for supporting spigots 46.

[0114] The anchor means in the form of water container 50 seen in FIG. 6 is adapted to engage a hoarding module 40 for anchoring the hoarding module to the floor and in the embodiment illustrated in FIGS. 7 to 9 is seen to include a pair of opposed vertically aligned recesses 51, 52 which serve the purpose of locating hoarding modules 40. Water container 50 has upper and lower filling and emptying screw caps 53 and 54. Recesses 55 are adapted to receive the forks of a forklift for transportation.

[0115] Box-shaped members 41, 42 have inwardly directed flanges 44, 45 which in use, as seen in FIG. 9, are received in the recesses 51, 52 of water container 50 and serve to provide respective supports for engagement by the jaws of clamps 49 which in this embodiment constitute the joining means for attaching together horizontally adjoining hoarding modules.

[0116] In use in this embodiment, the method of the present invention assembles a wall or shop hoarding by first positioning anchoring means 50 in place on a floor. Typically the water container constituting the anchoring means is positioned by means of a forklift. A hoarding module 40 is then positioned on container 50 with flanges 44, 45 sliding in recesses 51, 52. An upper hoarding module 40 is then fixed to the anchored lower hoarding module by lifting into position above the lower hoarding module and with spigots 46 extending upwardly and completely received in the lower ends of box-shaped members 41, 42 of the upper hoarding module. When in place above the lower hoarding module, spigots 46 will fall into the upper ends of box-shaped members 41, 42 of the lower wall until arrested by restraints

- 47, 48. When thus arrested, spigots 46 are equidistantly spaced in upper and lower box-shaped members 41, 42 thus enhancing the structural rigidity of the assembled wall.
- [0117] This mechanism for joining upper and lower hoarding modules allows jointing wall members which extend flush to a ceiling without the necessity of entering the ceiling space.
- [0118] A similar operation is then followed to assemble a horizontally adjoining wall assembly. The two horizontally adjoining wall assemblies are then joined together by positioning lever actuated clamps 49 over flanges 45, 44 of horizontally adjoining box-shaped members 41, 42 and actuating the clamps.
- [0119] In this embodiment it will be apparent that hoarding module 40 cooperates with other modules for erecting a hoarding. Module 40 includes a substantially rectangular panel member 43; first positioning means in the form of box-shaped members 41, 42 which positions module 40 to adjoin at least one other module along at least one of the module's horizontal sides, and second positioning means in the form of damps 39 which positions the module to adjoin at least one other module along at least one of the module's vertical sides. Module 40 cooperates with anchor means 50 for non-fixedly anchoring module 10 to a floor. The first positioning means 41, 42 cooperates with joining means in the form of spigots 46 to brace vertically adjoining modules in a hoarding. The first positioning means 41, 42 also cooperates with anchor means 50 for anchoring the braced vertically adjoining modules to the floor.
- [0120] Hinged corner panels are also provided where required, as are panels consisting of access doors. All panels are designed to accommodate stacking for storage and transportation, as are the panels designed to facilitate use of forklifts and pallet jacks for handling. A steel angle is also fixable to the base panel for the purpose of greater stability, or where semi-permanent fixing to the ground is required.
- [0121] The system is designed for use in both internal and external environments, though primarily aimed at the use during retail construction and refurbishment works.
- [0122] The system is preferably constructed of a light weight, moldable, durable, tough and aesthetically pleasing material which accommodates painting and cost efficient construction. The hoarding modules can be constructed from a suitable plastics material.
- [0123] It will be appreciated that the present invention has a number of advantages which include:
  - [0124] Significant cost savings are obtained because there is minimal wastage of material which can be re-used rather than being scrapped as is usually the case with most current hoardings which are custom built on site.
  - [0125] Fast construction comparative to traditional timber stud hoarding systems also provides cost savings.
  - [0126] The system is simple and easy to relocate and transport prior to and following its erection, without the need for drilling holes into the existing floor.
  - [0127] Due the simplicity of the system unskilled labor may be used for its construction.

- [0128] The system is designed to allow handling through limited access such as domestic door ways.
- [0129] Durability.
- [0130] The system is height adjustable.
- [0131] The system incorporates access doors, superseding the need for installing doors following construction, saving more time.
- [0132] Panels stack on top of each other following dismantling, allowing ease of transport and handling.
- [0133] Panels may be bolted to the floor for greater stability.
- [0134] The panels can be hinged together at the vertical edges to provide angulation of the hoarding as required.
- [0135] The panels have a variety of arrangements which provide bracing and stability.
- [0136] Sacrificial panels accommodate signage for marketing purposes.
- [0137] It will of course be realised that whilst the above has been given by way of an illustrative example of this invention, all such and other modifications and variations hereto, as would be apparent to persons skilled in the art, are deemed to fall within the broad scope and ambit of this invention as is herein set forth.
- 1. A hoarding module cooperable with other modules for erecting a hoarding, the module including:
  - a substantially rectangular panel member;
  - first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the substantially rectangular panel member, and
  - second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the substantially rectangular panel member;
    - wherein the second positioning means cooperates with joining means to hinge together adjoining modules in a hoarding.
- 2. A hoarding module as claimed in claim 1, wherein the first positioning means includes two pairs of opposed first receiving means positioned adjacent the first pair of opposite sides at substantially opposite ends thereof, the first receiving means receiving joining means and cooperating therewith to join hoarding modules adjoining on the first pair of opposite sides.
- 3. A hoarding module as claimed in claim 2, wherein the second positioning means includes
  - a pair of opposed second receiving means positioned adjacent the first pair of opposite sides along one of the other pair of opposite sides, and
  - third receiving means positioned along the other of the other pair of opposite sides and receivable between a pair of opposed second receiving means of a hoarding module adjoining on one side of the other pair of opposite sides;

- the second and third receiving means receiving joining means and cooperating therewith to join hoarding modules adjoining on the other pair of opposite sides.
- 4. A hoarding module as claimed in claim 3, wherein the first receiving means includes a first set of sleeves extending parallel to the other pair of opposite sides, the second receiving means includes a second set of sleeves parallel to the first set and extending along one of the other pair of opposite sides, and the third receiving means includes a third sleeve parallel to the first set and extending along the other of the other pair of opposite sides; wherein the joining means includes cylindrical pins closely receivable within the sets of sleeves, and wherein the second set of sleeves on one module cooperates with the third sleeve on an adjoining module and with a cylindrical pin to hinge together the adjoining modules along respective sides thereof.
- 5. A hoarding module as claimed in claim 4, wherein the third receiving means is receivable between a pair of opposed first receiving means of a hoarding module in abutment thereto, the first and third receiving means receiving joining means and cooperating therewith whereby a plurality of vertically aligned modules brace a hoarding comprising a plurality of joined modules in abutment thereto.
- 6. A hoarding module as claimed in claim 5, and including fourth receiving means in the form of a fourth set of sleeves inset respectively from the first pair of opposite sides which cooperate with the second set of sleeves, the second and fourth set of sleeves receiving joining means and cooperating therewith whereby a plurality of vertically aligned modules brace a hoarding comprising a plurality of joined modules in abutment thereto.
- 7. A hoarding module as claimed in claim 6, the fourth receiving means cooperating with anchor means for non-fixedly anchoring the module to a supporting surface.
- **8**. A hoarding module as claimed in claim 1, and including fixing means for fixing the module to scaffolding or the like.
- **9**. A hoarding module as claimed in claim 8, wherein the fixing means includes a plurality of supports supporting mounts attachable to the scaffolding.
- 10. A hoarding module as claimed in claim 1, wherein the first positioning means cooperates with joining means to brace vertically adjoining modules in a hoarding.
- 11. A hoarding module as claimed in claim 10, wherein the first positioning means cooperates with anchor means for anchoring the braced vertically adjoining modules to a floor or the like.
- 12. A hoarding module cooperable with other modules for erecting a hoarding, the module including
  - a substantially rectangular panel member;
  - first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the substantially rectangular panel member, and
  - second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the substantially rectangular panel member;
    - wherein the first positioning means cooperates with joining means to brace vertically adjoining modules in a hoarding.

- 13. A walling assembly for erecting a hoarding or the like, the walling assembly including
  - a plurality of substantially rectangular hoarding modules, and
  - anchor means for non-fixedly anchoring a hoarding module to a floor or the like;
  - the hoarding modules including first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the hoarding module and second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the hoarding module;
  - and joining means for cooperating with the second positioning means to hinge together horizontally adjoining modules in a hoarding and for cooperating with the first positioning means to join vertically adjoining hoarding modules.
- 14. A walling assembly as claimed in claim 13, wherein the first positioning means includes a first set of sleeves extending parallel to the other pair of opposite sides and the second positioning means includes a second set of sleeves parallel to the first set and extending along the other pair of opposite sides.
- **15**. A walling assembly as claimed in claim 14, wherein the joining means includes cylindrical pins closely receivable within the sets of sleeves.
- 16. A walling assembly as claimed in claim 15, wherein some of the sleeves in the second set of sleeves on one module cooperates with other sleeves in the second set of sleeves on an adjoining module and with a cylindrical pin to hinge together the adjoining modules along respective sides thereof.
- 17. A walling assembly as claimed in claim 13, wherein the modules include door and/or window means.
- **18**. A walling assembly as claimed in claim 13, wherein the modules are made from a plastics material.
  - 19. A method of erecting a hoarding, the method including positioning anchoring means in place on a floor or the like:
  - locating on the anchoring means a first substantially rectangular hoarding module having first positioning means which positions the module to adjoin at least one other module along at least one of a first pair of opposite sides of the hoarding module and second positioning means which positions the module to adjoin at least one other module along at least one of the other pair of opposite sides of the hoarding module;
  - positioning a second module substantially identical to the first module along the upper side of the first module;
  - positioning a third module substantially identical to the first module along one of the vertical side s of the first module;
  - and joining adjoining modules by joining means cooperating with the positioning means on each module, the second positioning means on the first and third modules cooperating with joining means to hinge together the first and third modules in the hoarding.

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