



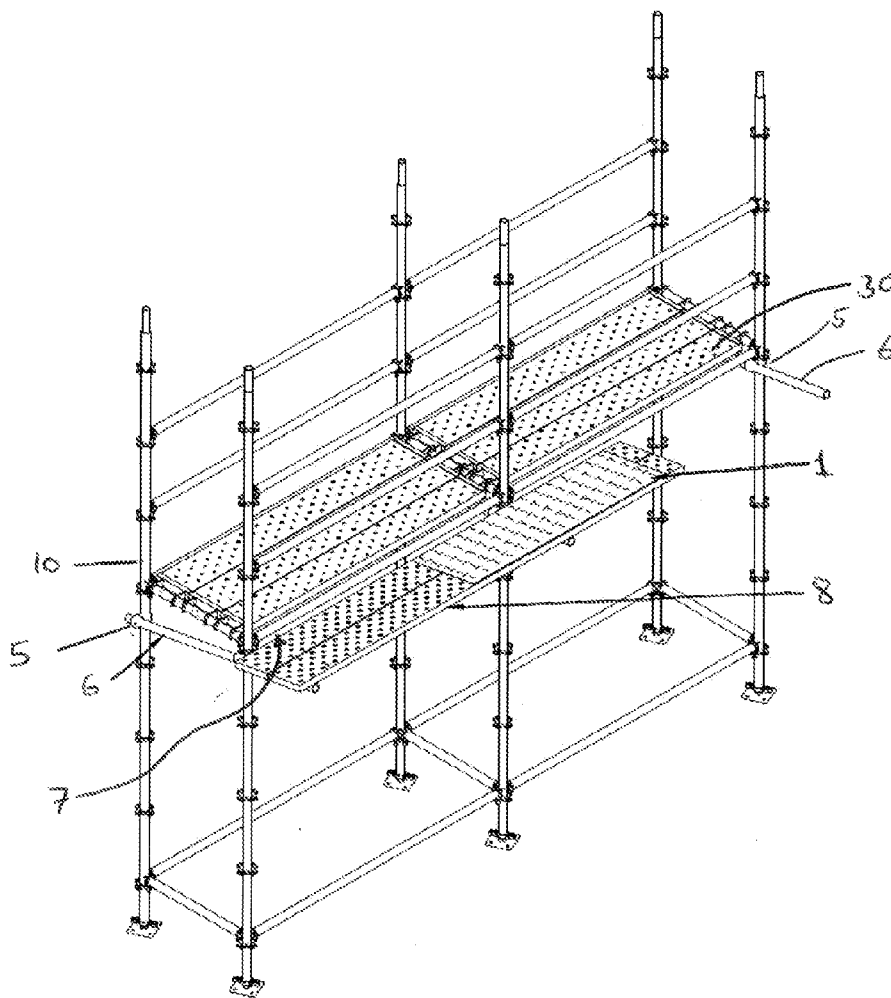
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(19) **United States**(12) **Patent Application Publication**
SO(10) **Pub. No.: US 2016/0032600 A1**(43) **Pub. Date: Feb. 4, 2016**(54) **GUARD FOR SCAFFOLDING**(71) Applicant: **WLS Intellectual Property Limited,**
Aberdeen (HK)(72) Inventor: **Yu Shing SO,** Aberdeen (HK)(21) Appl. No.: **14/449,340**(22) Filed: **Aug. 1, 2014****Publication Classification**(51) **Int. Cl.**
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E04G 7/00 (2013.01)

(57)

ABSTRACT

Scaffolding comprising, a scaffold structure, assembled next to yet spaced from an adjacent face of a building structure with a gap therebetween, comprising a plurality of standards extending vertically adjacent the structure, horizontal ledgers extending between standards and tying the standards in a fixed interrelationship, and a platform supported from the standards and/or the ledgers thereby to be conferred a vertical support in a substantially horizontal disposition; and a guard, as a lateral extension to the platform, configured to hinge or otherwise articulate downwardly from the scaffold structure to bear onto the face of the building structure to at least partially span across the gap.



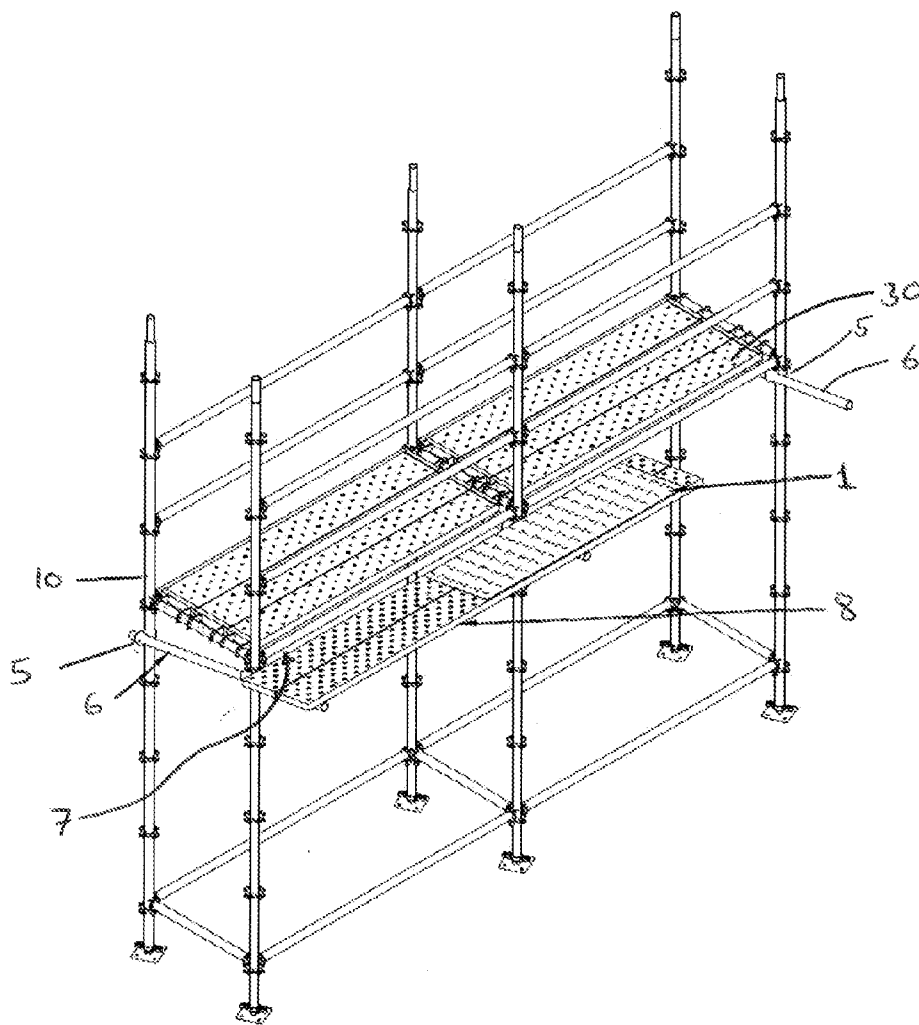


FIGURE 1 – PRIOR ART

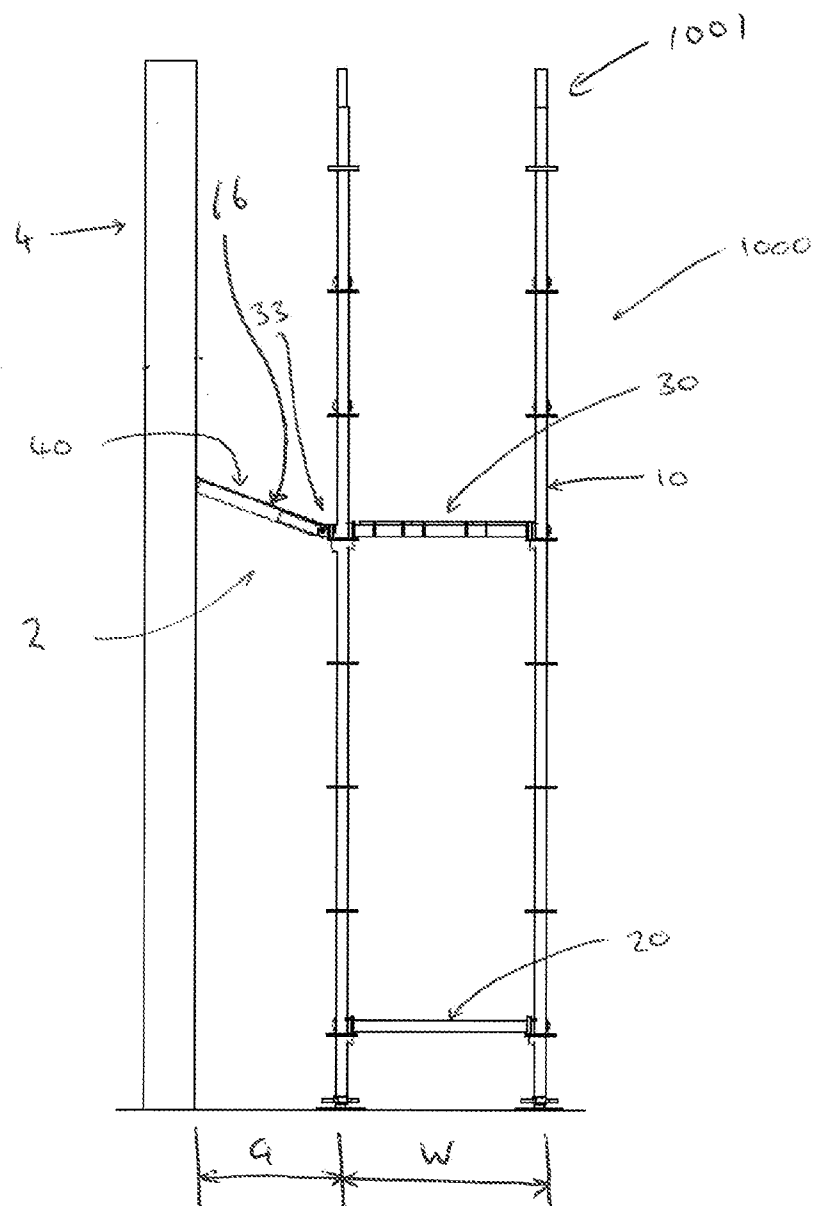


FIGURE 2



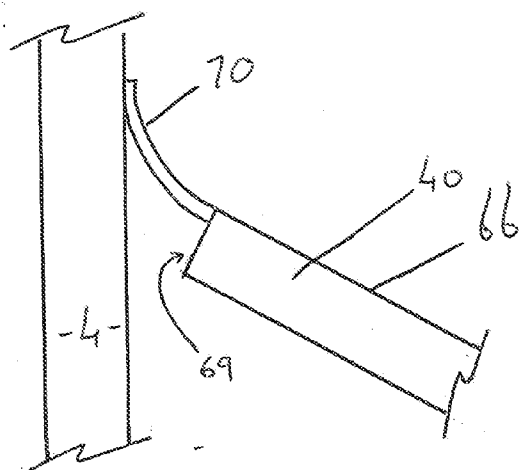


FIGURE 3A

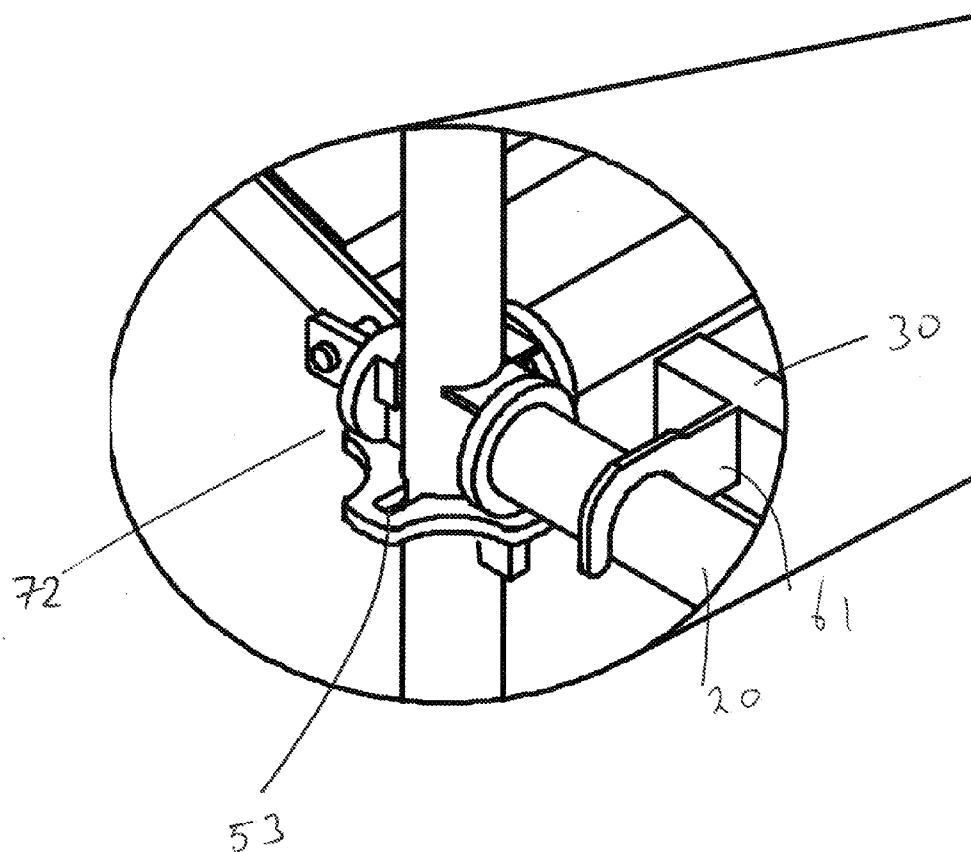


FIGURE 4

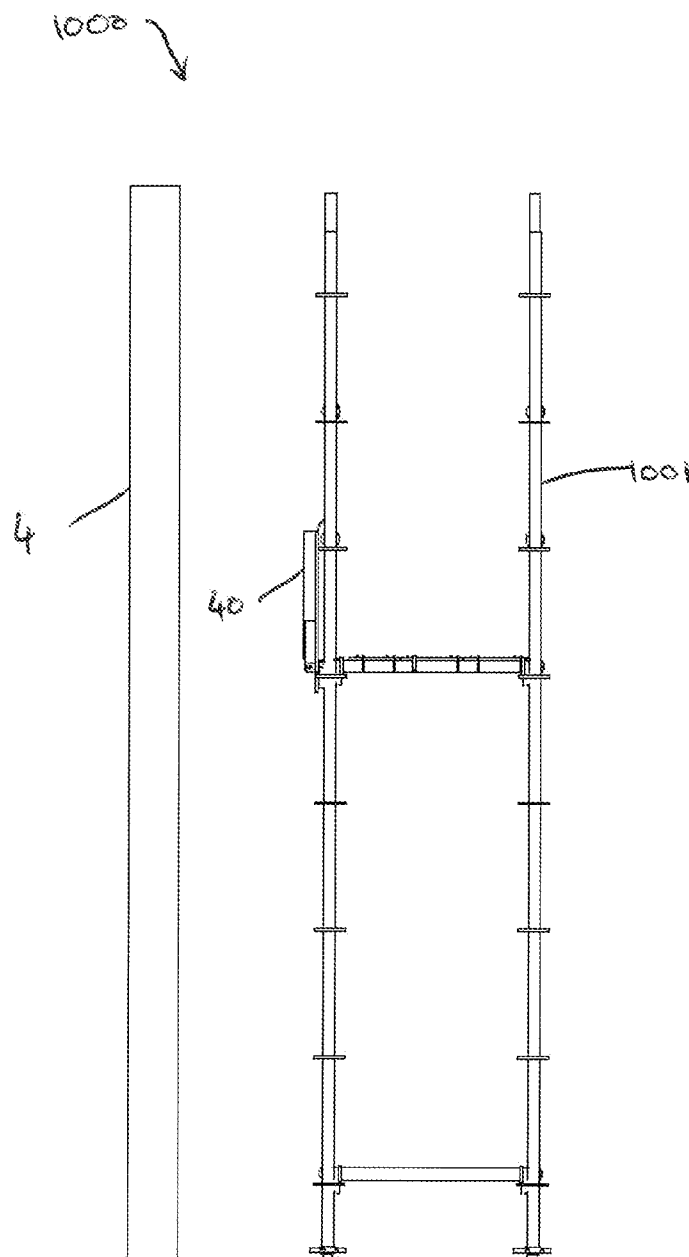


FIGURE 5

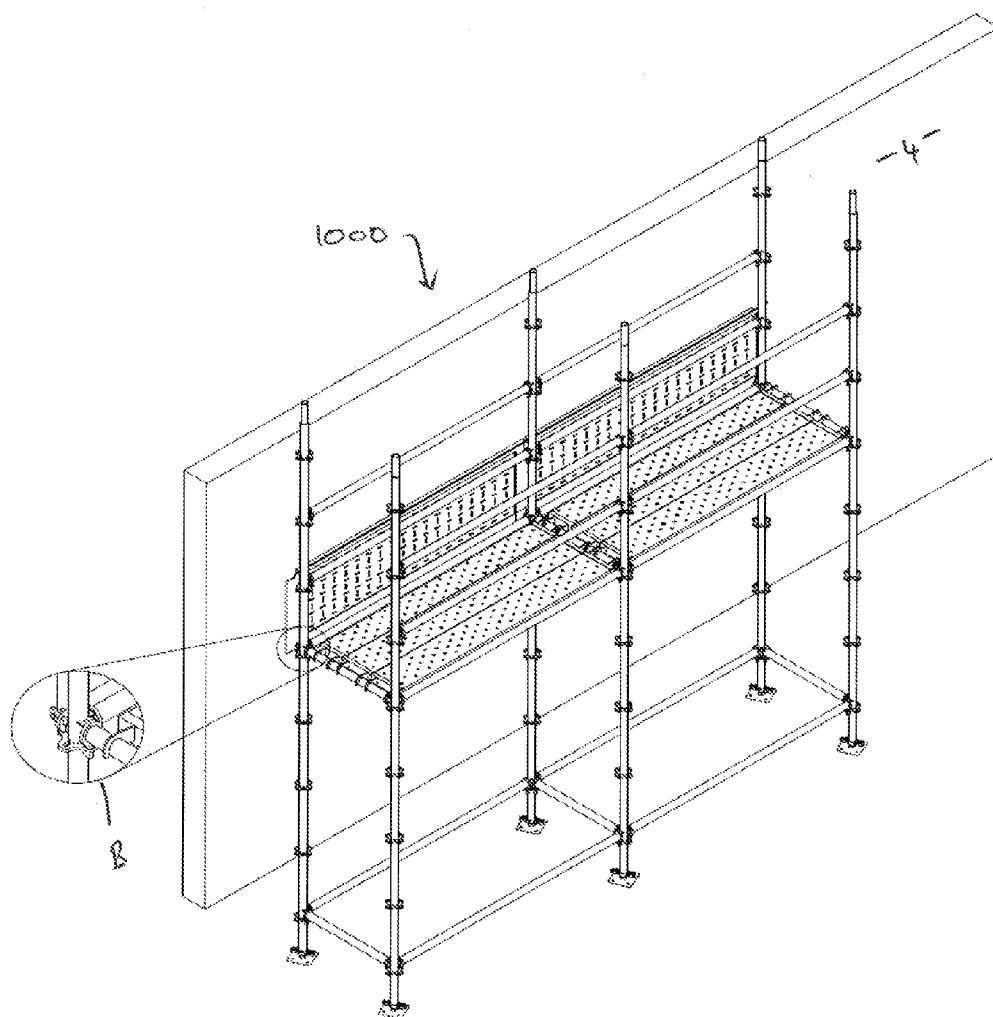


FIGURE 6

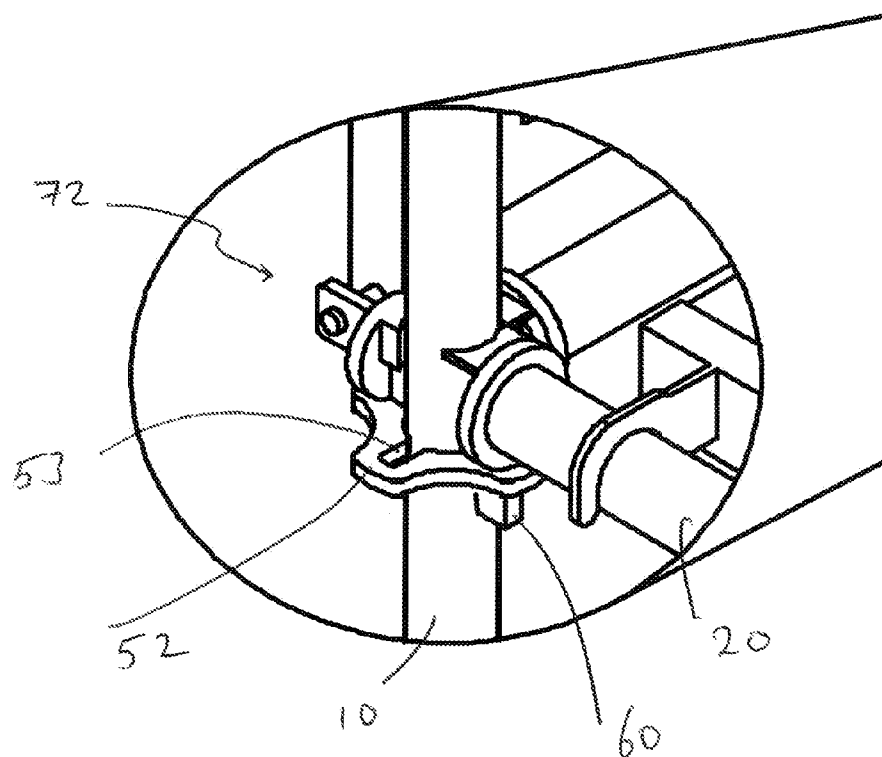


FIGURE 7

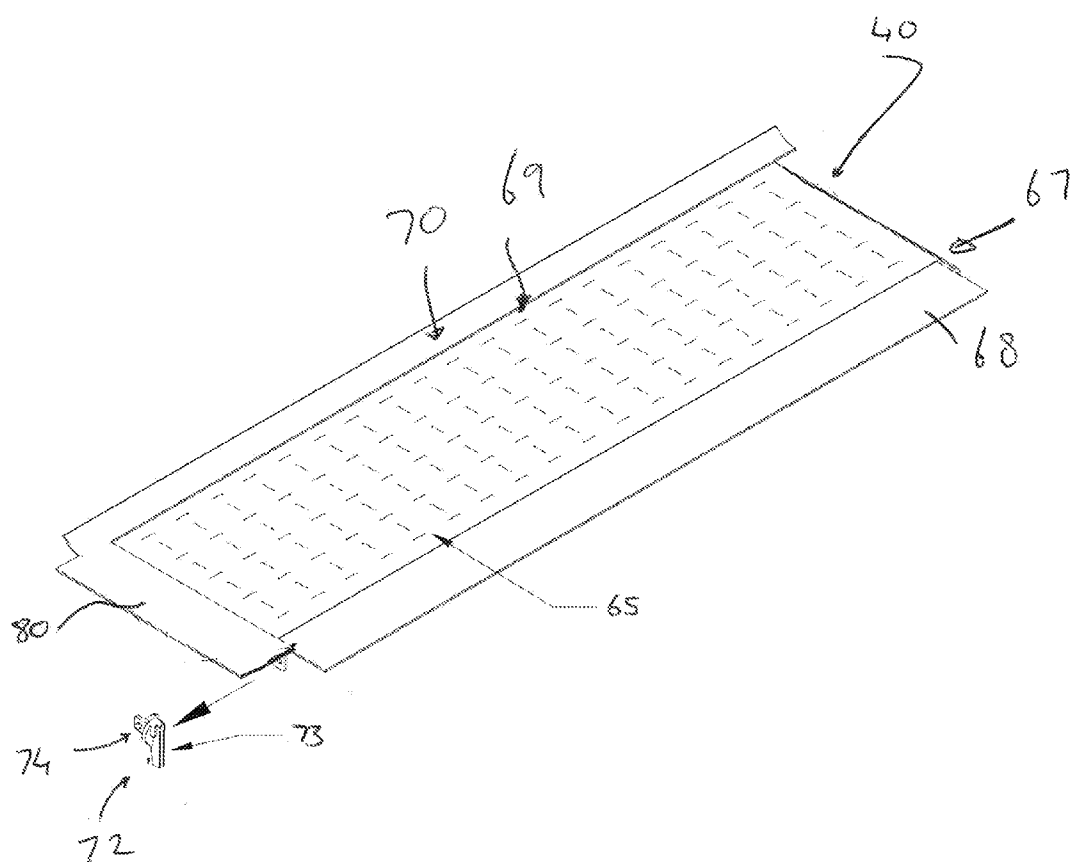
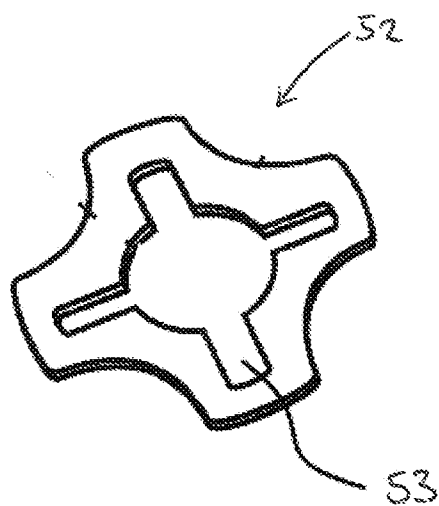
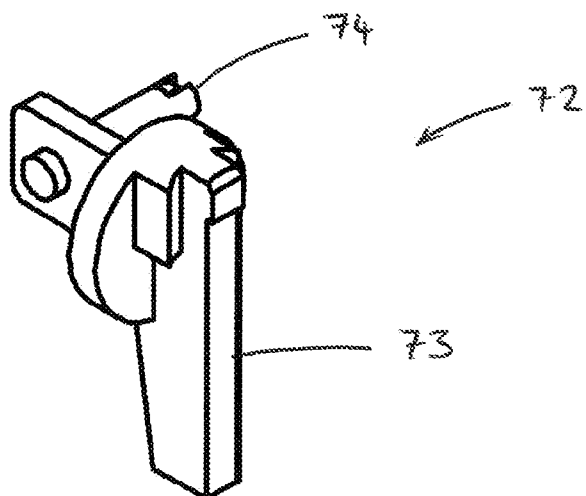


FIGURE 8



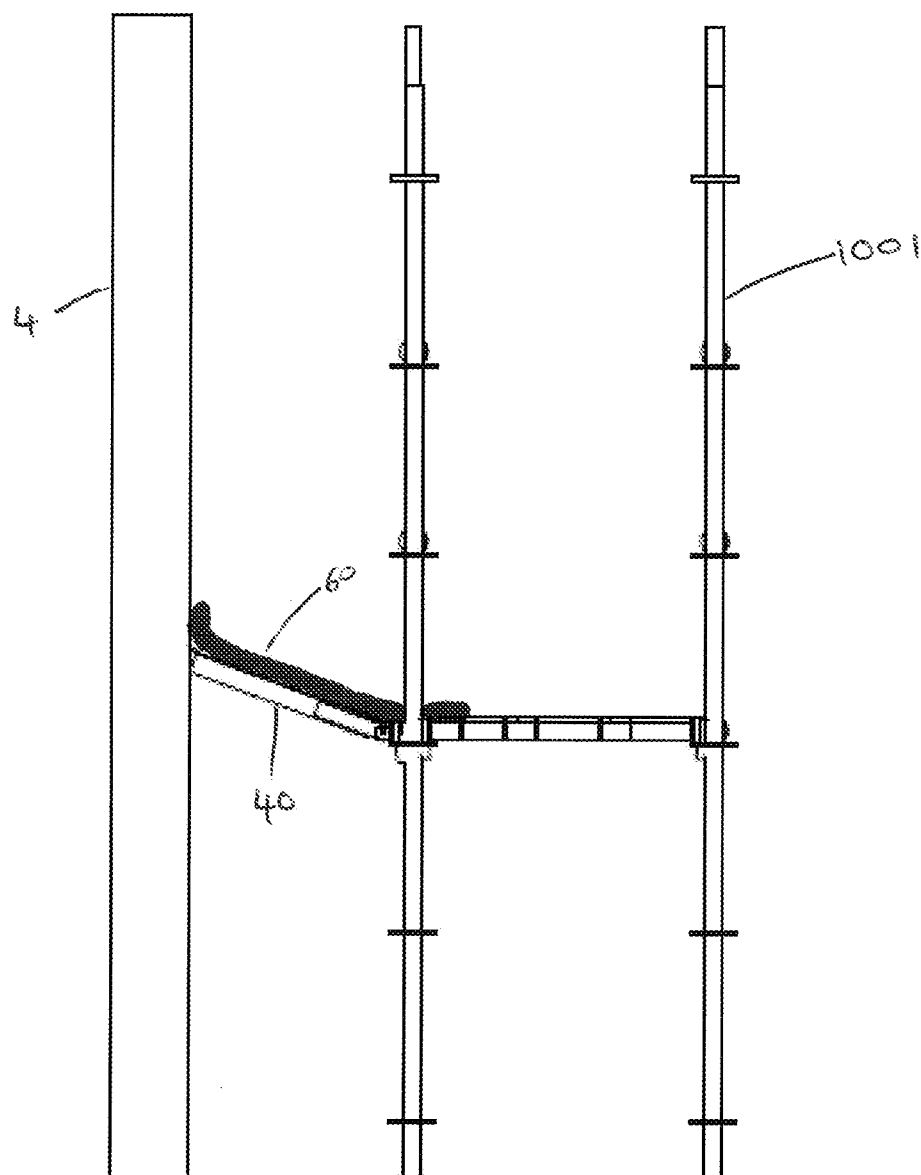


FIGURE 10

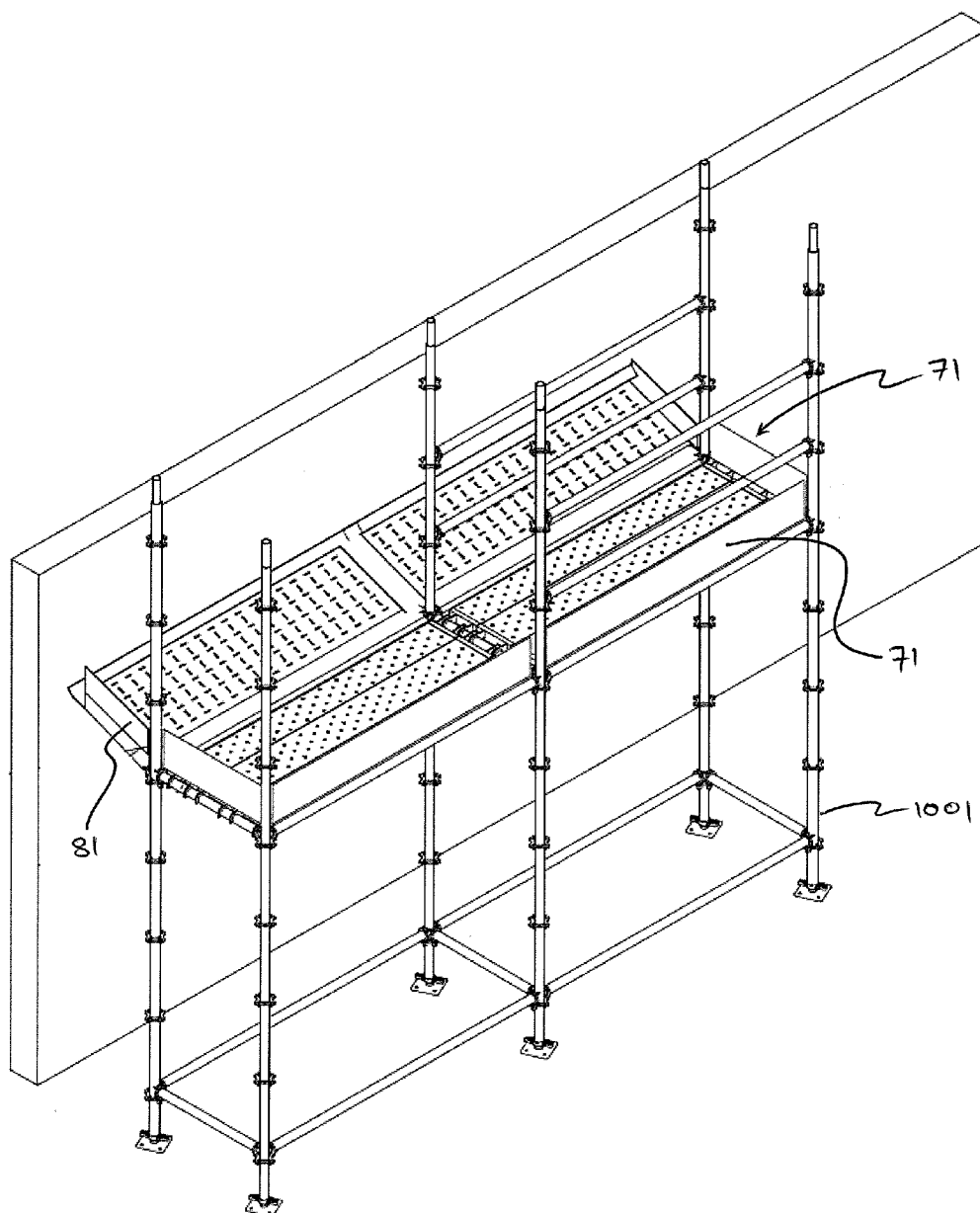


FIGURE 11

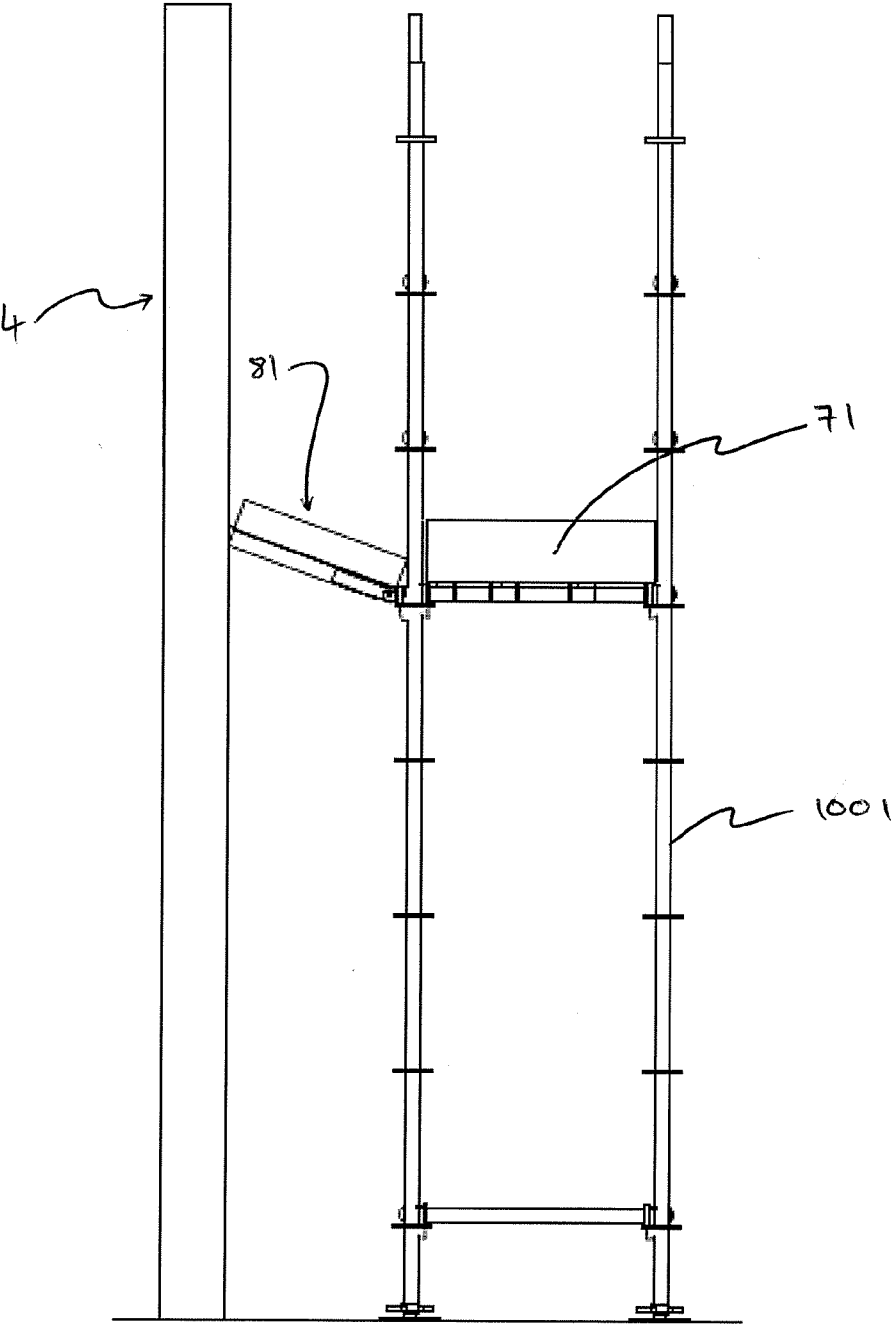


FIGURE 12

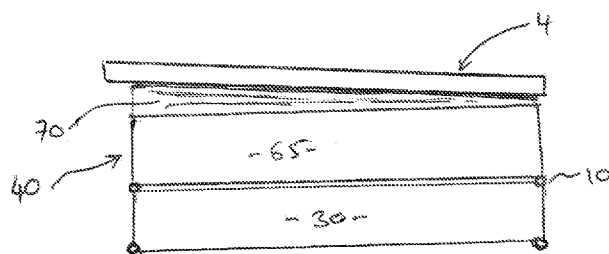


FIGURE 13B

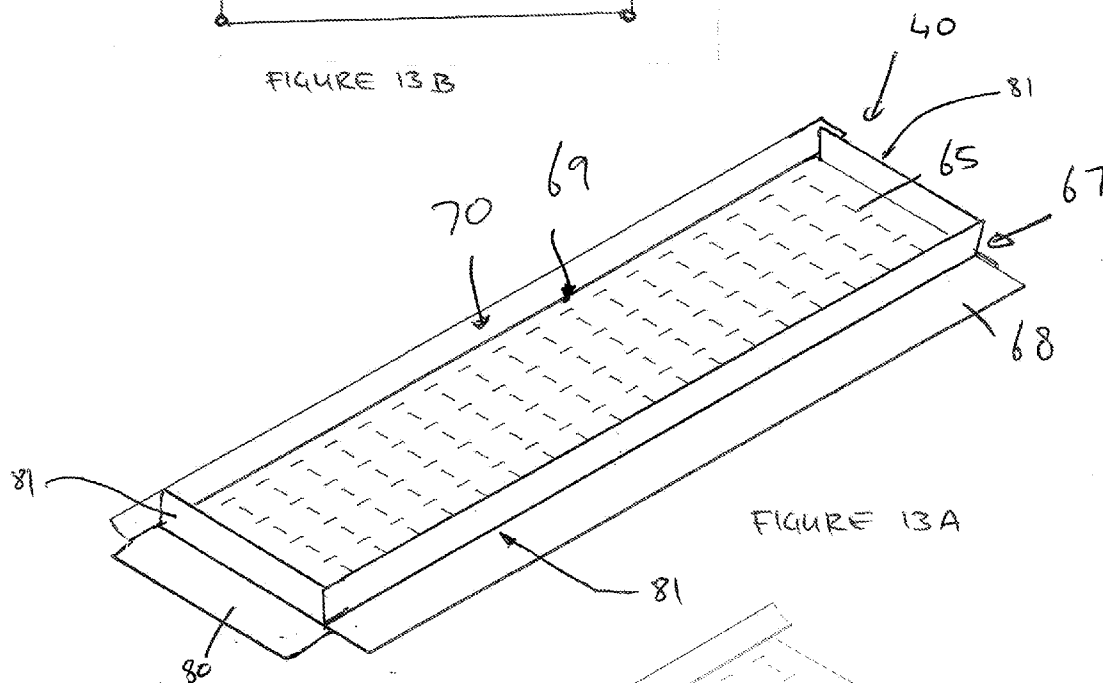


FIGURE 13A

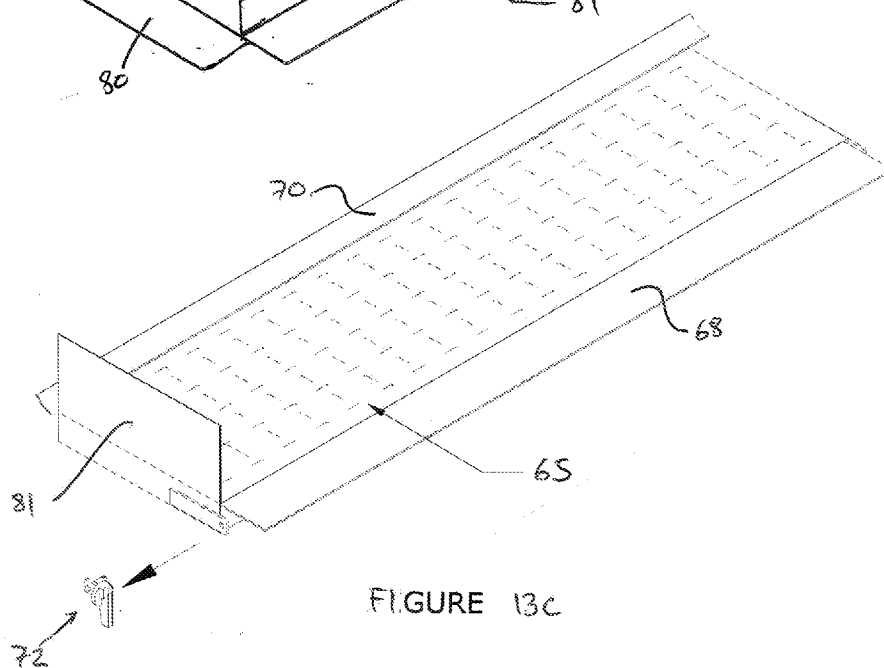


FIGURE 13C

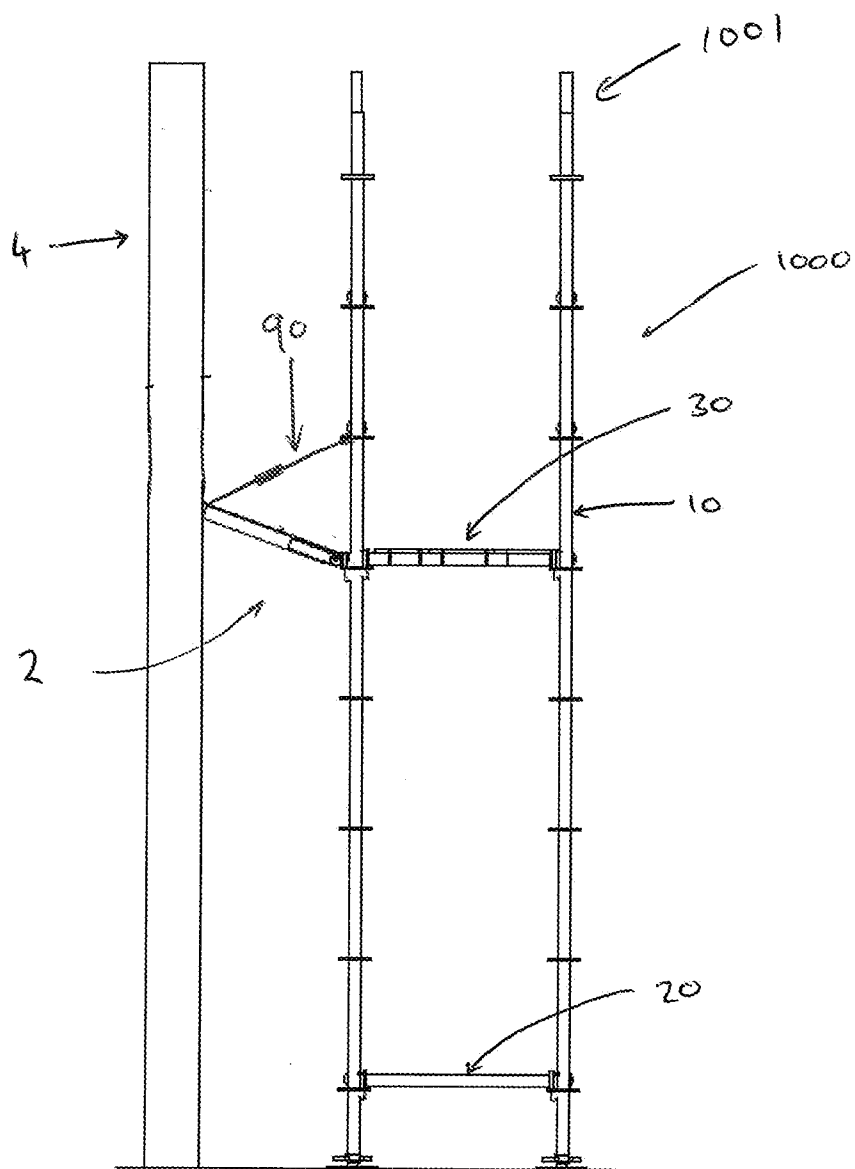


FIGURE 14

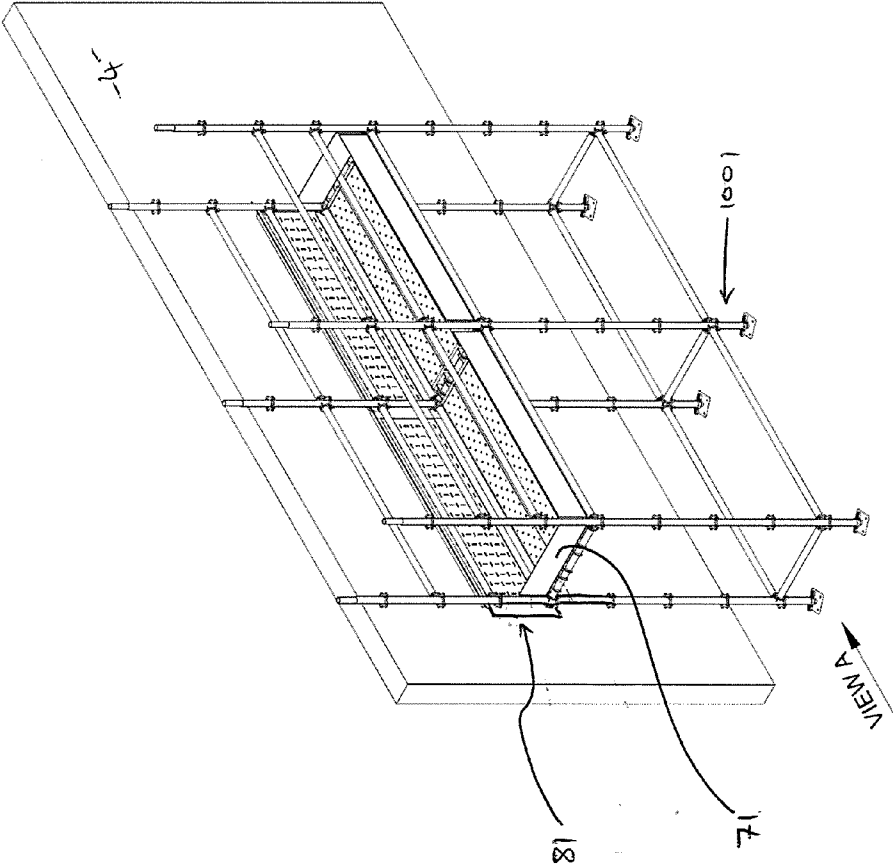


FIGURE 15A

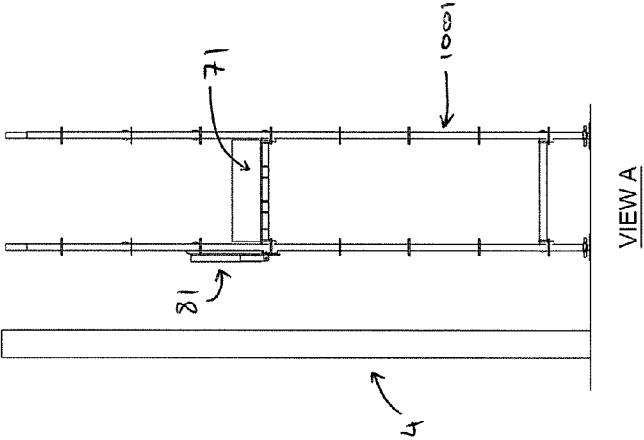


FIGURE 15B

GUARD FOR SCAFFOLDING

[0001] The present invention relates to a guard for scaffolding and a scaffold structure presenting a guard. More particularly but not exclusively it relates to a fold down guard to sit between a gap between a scaffold structure and an adjacent structure presented to be able to arrest falling objects.

BACKGROUND

[0002] Scaffolding structures are used to support people and material in the construction or repair of buildings and other large structures. Such structures are usually of a modular system of metal pipes or tubes, although other materials may also be used.

[0003] The basic components of scaffolding structures are standards, rosettes (or couplers), ledgers and boards. The standards are upright members, and the ledgers are horizontal members. The standards and ledgers may be joined together at a rosette. A rosette may join multiple standards and ledgers together, in combination with other rosettes, standards and ledgers they are able to form a lattice work structure.

[0004] Standards and ledgers are usually tube form and made either of steel or aluminium. The rosette allows further standards to be joined to the rosette above the lower standard. Walk boards form working surfaces and link between the ledgers. Timber, steel or aluminium boards are used, as well as laminate boards.

[0005] The purpose of a working scaffold is to provide a safe place of work with safe access suitable for the work being done. When of a substantial height, scaffold structures typically rely on the adjacent structures for stability. Often there may be a gap between the scaffold structure and the adjacent structure, as the scaffold cannot, or is not desired to, be directly adjacent and abut the adjacent structure.

[0006] It may be the case that scaffolds are built over a work site, or public site. Anything that falls off the scaffold may be a serious hazard to those working below. One of the spaces in which objects may fall is between the scaffold structure and the adjacent structure given that above that is where a lot of work activity takes place.

[0007] Known solutions to preventing objects falling a significant distance, are plates that extend substantially parallel from above or below the boards, towards the adjacent structure as shown in FIG. 1. These plates 1 are put in place in a fixed manner via clamped pipes 6 and can catch debris from falling further. Problems with these plates may include;

[0008] Difficulty installing or removing the as they are typically set in place using pipe clamps 5 that clamp onto standards 10 and/or ledgers—especially at height.

[0009] These plates may from time to time be required to be removed temporarily to bring up tools through the gap which involved removing the support structure and pipe clamps that holds the plates in place.

[0010] The plate support structure involves a plurality of tubes 6 to be installed.

[0011] The plates may still leave small gaps 7 between the plates and the walk boards 30.

[0012] The plates lack easy modification to adjust the distance of a front edge 8 at which the plate extends away from the scaffold towards the adjacent structure.

[0013] In this specification, where reference has been made to external sources of information, including patent specifications and other documents, this is generally for the purpose of providing a context for discussing the features of the

present invention. Unless stated otherwise, reference to such sources of information is not to be construed, in any jurisdiction, as an admission that such sources of information are prior art or form part of the common general knowledge in the art.

[0014] For the purpose of this specification, where method steps are described in sequence, the sequence does not necessarily mean that the steps are to be chronologically ordered in that sequence, unless there is no other logical manner of interpreting the sequence.

[0015] It is an object of the present invention to provide a debris catcher for a scaffold which overcomes or at least partially ameliorates some of the abovementioned disadvantages or which at least provides the public with a useful choice.

BRIEF DESCRIPTION OF THE INVENTION

[0016] In a first aspect the present invention may be said to broadly consist in a scaffolding comprising,

[0017] a scaffold structure, assembled next to yet spaced from an adjacent face of a building structure with a gap therebetween, comprising:

[0018] a. a plurality of standards extending vertically adjacent the structure,

[0019] b. horizontal ledgers extending between standards and tying the standards in a fixed interrelationship, and

[0020] c. a platform supported from the standards and/or the ledgers thereby to be conferred a vertical support in a substantially horizontal disposition; and

[0021] a guard, as a lateral extension of or to the platform, configured to hinge or otherwise articulate downwardly from the scaffold structure to bear onto the face of the building structure to at least partially span across the gap.

[0022] Preferably the guard is configurable between (i) a rotationally secure stowed condition proximal more the scaffold structure and (ii) a deployed position that is rotationally free save for being prevented from rotating beyond where the guard comes to bear onto the building structure.

[0023] Preferably the guard, when in the deployed condition, comprises an upwards facing face contiguous with at least one or more of the platform and the adjacent face of the adjacent building.

[0024] Preferably the guard is elongate and is relatively narrow and thin compared to its elongate length.

[0025] Preferably the guard is substantially rectangular in plan shape and has its two major parallel edges positioned parallel the adjacent face of the building.

[0026] Preferably the minor edges of said guard are of a length greater than the distance across the gap.

[0027] Preferably each said standard includes a plurality of spaced apart rosettes at each of which at least one ledger is able to become removable secured to a said standard, and wherein the guard is supported in a hinged manner from a rosette.

[0028] Preferably said guard includes a hinge assembly that includes a member that is insertable into a slot of a rosette of a said standard to be removably engageable and become supported with a standard.

[0029] Preferably the guard includes a flexible lip that extends in a manner engaging the face of the building in a compliant manner to prevent objects from falling beyond the guard at said face.

[0030] Preferably the guard includes at least one upstand provided at at least one peripheral edge of the guard to prevent objects from moving off the guard thereat.

[0031] Preferably the peripheral edges that span across the gap are provided with an upstand to prevent objects from moving off the guard thereat.

[0032] Preferably the guard is removably engageable with the scaffolding.

[0033] Preferably the guard is a plank.

[0034] Preferably the guard includes a deck and a peripheral frame supporting the deck.

[0035] Preferably the guard is tethered to said scaffold structure.

[0036] Preferably the guard is supported at locations close to or at each end of a major edge thereof with said scaffold structure.

[0037] Preferably the guard includes a flexible lip that extends in a manner to abut or overlap the platform to close any otherwise defined gap between the platform and the guard.

[0038] In a second aspect the present invention may be said to be scaffolding comprising a scaffold structure of a plurality of spaced apart upright supports and a platform inwardly of the upright supports to be erected adjacent yet spaced from a building structure and a fringe guard hingedly supported by said scaffold structure and deployed or deployable to extend outwardly of the upright supports from a stowed condition upwardly of its hinge axis to span between the building structure and the scaffold structure.

[0039] Preferably the fringe guard is configurable between a rotationally secure stowed condition and a rotationally free deployed position.

[0040] Preferably the fringe guard in the deployed position comprises an upwards facing face contiguous with at least one or more of the platform and an adjacent face of an adjacent building.

[0041] Preferably the fringe guard is relatively narrow and thin compared to its elongate length.

[0042] Preferably the fringe guard is removably engageable to the upright supports via Preferably the fringe guard comprises flexible members about its periphery configured to cover a gap/s between the fringe guard and one more selected from a) the platform, b) the building structure and c) another adjacent fringe guard.

[0043] Preferably the platform comprises borders extending above and substantially perpendicular to the uppermost surface of the platform about at least part of the platform periphery.

[0044] Preferably the guard comprises a deck and borders extending above and substantially perpendicular to the uppermost surface of the deck at at least part of the guard periphery.

[0045] Preferably the structure is a building structure.

[0046] preferably the structure is a wall of a building.

[0047] In a further aspect the present invention may be said to be a guard for closing a gap down which items might fall between a scaffold structure and an adjacent building, said guard being panel or platform like in nature with a longitudinal axis to run along the gap horizontally, the lateral extremities of the guard being adapted (1) proximally to the scaffolding, to engage complementary said scaffold structure from above, and (2) distally of the scaffold structure to bear onto the building structure.

[0048] Preferably the guard is configurable between a rotationally secure stowed condition and a rotationally free deployed position.

[0049] Preferably the guard in the deployed position is configured to comprise an upwards facing face contiguous from the scaffolding, across the gap, to the adjacent face of the adjacent building.

[0050] Preferably the guard is removably engageable with the scaffold structure via downwardly insertable projections which engage with the complementary features of the scaffold structure.

[0051] Preferably the downwardly insertable projections comprise pintles to engage with complementary orifices on the guard, that act together to form a hinge parallel the longitudinal direction of the gap.

[0052] Preferably nodal rosettes provide by vertically extending standards of the scaffold structure are used (i) to assist tying of at least vertical standards or standard assemblies of the scaffolding in a fixed interrelationship using bracing members and (ii) to locate and engage the downwardly insertable projections.

[0053] Preferably the guard comprises flexible members about the guard periphery configured to cover gap/s between the guard and one or more selected from a) the scaffolding, b) the building and c) another adjacent guard.

[0054] In yet a further aspect the present invention may be said to be a guard for closing a gap down which items might fall between a scaffold structure and an adjacent building, said guard being deck like in nature with a longitudinal axis to run along the gap horizontally, the lateral extremities of the guard being adapted (1) proximally to the scaffolding, to be supported by said scaffold structure in an pivotal manner, and (2) distally of the scaffold structure to pivotally come to bear onto the building structure.

[0055] Preferably, the guard is lowerable about an axis, parallel to the longitudinal axis, of the scaffold structure.

[0056] Preferably, the guard is pivotable about a rotational axis parallel to the longitudinal axis.

[0057] Preferably, the guard is removably engageable with the scaffold structure.

[0058] Preferably, the projections engage with a complementary component of said scaffold structure.

[0059] Preferably, the projections are intermediate the scaffold structure and the rotational axis.

[0060] Preferably, the guard comprises a hinge arrangement.

[0061] Preferably, the hinge arrangement is defined in part by an assembly that includes such projections.

[0062] Preferably, the hinge arrangement comprises at least one gudgeon and complimentary pintle.

[0063] Preferably, the gudgeon is a hole in the guard.

[0064] Preferably, the gudgeon is a U shaped engagement in the guard.

[0065] Preferably, the pintle is integral with scaffold structure.

[0066] Preferably, the pintle is engageable with the scaffold structure.

[0067] Preferably, the pintle is part of the assembly.

[0068] Alternatively, the guard comprises the pintle.

[0069] Preferably, the pintle locates in a complementary component of the scaffold structure.

[0070] Preferably, the guard is a load bearing member when the guard bears on said building structure.

[0071] Preferably, the guard comprises a net like material.

[0072] Preferably, the guard comprises a stowed and a deployed position.

[0073] Preferably, in the stowed position the guard is not free to rotate.

[0074] Preferably, in the deployed position the guard is free to rotate.

[0075] Preferably, there are a plurality of guards dependent from said scaffold structure.

[0076] Preferably, the scaffold structure comprises a working platform.

[0077] Preferably, the guard is located at or towards the working platform.

[0078] Preferably, the guard is contiguous with the working platform.

[0079] Preferably, in operation the guard in the deployed position is contiguous with both the working platform and the adjacent face of the building structure.

[0080] Preferably, the guard is engaged to the scaffold structure whilst the scaffold structure is erect.

[0081] Preferably, the guard and hinge arrangement is engaged to the scaffold structure whilst the scaffold structure is erect.

[0082] Preferably, the guard and hinge arrangement are integral with a) the working platform member and/or b) the scaffold structure.

[0083] Herein also described is scaffolding comprising a scaffold structure supporting both working surface/walkway platform members and at least one flanking guard member to the platform member(s) downwardly lowerable to extend more outwardly of the working surface/walkway platform member(s).

[0084] Preferably, the flanking guard member is lowerable about a front edge of the working surface member.

[0085] Preferably, the front edge is an elongate front edge substantially parallel to an adjacent building structure face in operation.

[0086] Preferably, the flanking guard member is configured to at least partially span a gap between the working surface member and the adjacent building structure face.

[0087] Preferably, the flanking guard member is supported by the building structure face when the flanking guard member is in its more outwardly position.

[0088] Preferably, the flanking guard member is a load bearing member.

[0089] Preferably, the flanking guard member comprises a net like material.

[0090] Preferably, the scaffolding comprises a hinge arrangement at or near the horizontal plane of the working surface member to allow the flanking guard member to move downwardly.

[0091] Preferably, the hinge arrangement is a support that restricts an elongate proximal side of the flanking guard member proximal the working surface member from downwards movement.

[0092] Preferably, the tray prevents movement of the proximal side towards the working surface member.

[0093] Preferably, the hinge arrangement comprises at least one gudgeon and pintle.

[0094] Preferably, the hinge arrangement comprises a hinge axis intermediate the working surface member front edge and the flanking platform member proximal side.

[0095] Preferably, the hinge axis is on the same plane of the uppermost surface of the working surface member.

[0096] Preferably, the hinge axis is below the plane of the uppermost surface of the working surface member.

[0097] Preferably, the flanking guard member is lowerable towards an adjacent building structure about the hinge axis.

[0098] Preferably, the flanking guard member comprises engaged in a stowed position where the flanking platform member is substantially perpendicular to the working surface member.

[0099] Preferably, the flanking guard member has a deployed position where the flanking guard member is not rotatably secured.

[0100] Preferably, the flanking guard member is engaged to the hinge arrangement whilst the scaffold structure is erect.

[0101] Preferably, the working surface member comprises a border about at least part of its periphery region.

[0102] Preferably, the border is an upright members extending above and substantially perpendicular to the uppermost surface of the working surface member.

[0103] Also herein described is, in combination,

[0104] a building structure (whether partially or fully erected),

[0105] a scaffold structure having working surface/walkway platforms, and

[0106] platforms interposed between the scaffolding structure and the building structure, each deployable downwardly of its proximal support from the scaffolding structure to be distally supported by the building structure.

[0107] Also herein described is scaffolding comprising both working surface platform members supported by a scaffold structure and at least one flanking platform member downwardly lowerable to extend more outwardly of the working surface platform member(s).

[0108] Also herein described is a fringe assembly of, or associable with, a scaffold structure to provide a gap fill between a working surface or platform ("platform") the scaffold structure, the fringe assembly having proximal engagement features for the scaffolding and/or some complementary feature(s) thereof, and the fringe itself articulable relative to said engagement features whereby the fringe can deploy downwardly to some distally imposed limit or can deploy down to its said gap fill condition.

[0109] Preferably the bracing members are in addition to any bracing provided by platforms or working surface providing members supported as a fill between longitudinally and laterally spaced pairings of said standards or standard assemblies.

[0110] Preferably said fill can support a worker.

[0111] Preferably said fringe if appropriately distally supported can at least in part support a worker despite rising relative to and from its hinge axis.

[0112] Also herein described is, in close proximity to a building structure, scaffold structure with walkway/working surface platforms and guard members deployed from the scaffold structure to rest on the building structure.

[0113] Preferably the proximal adaption is at least a pair of downwardly insertable projections.

[0114] Preferably such projections are more proximal than a hinge axis defined in part by an assembly of the guard that includes such projections.

[0115] Preferably the guard members (as a longitudinal flank fill between the scaffold structure and building structure) have been deployed downwardly and outwardly of a proximal engagement to the scaffold structure thereby to distally rest against the building structure.

[0116] Also herein described is scaffolding along yet with walkways spaced from a building structure such scaffolding being characterised in having nodal features used in two ways (1) to at least in part support bracing, walkways or both of the scaffolding, and (2) directly or indirectly to at least in part support a guard to the space to the building structure.

[0117] Preferably, if the guard is directly supported, it has been inserted from above, and if the guard is indirectly supported, supports into which the guard has been inserted from above were themselves inserted from above.

[0118] Preferably the bracing and/or walkways were themselves inserted from above.

[0119] Also herein described is, in a scaffolding structure, the use of nodal rosettes (i) to assist tying of at least rear vertical standards or standard assemblies in a fixed interrelationship using bracing members and (ii) to proximally locate hinges of a fringe structure.

[0120] Also herein described is a scaffold lattice supporting working surfaces or platforms ("platform(s)") at different levels and additionally hinging a downwardly deployable fringe member to proximally rise to its distal extent from the level or near the level of a said platform.

[0121] Also herein described is a scaffolding lattice having nodal support forms (e.g. rosettes) and used to support directly or indirectly (i) bracing, bracing and platforms, or platforms and (ii) proximal hinges of a fringe platform or engagement links of such proximal hinges.

[0122] Also herein described is, in close proximity to a building structure, a scaffold structure with horizontal elongate working surface platforms extending parallel an adjacent vertical wall of the building and guard members deployed from the scaffold structure to rest on the vertical wall of the building structure.

[0123] Preferably the guard members (as a longitudinal flank fill between the scaffold structure and building structure) have been deployed downwardly and outwardly of a proximal engagement to the scaffold structure thereby to distally rest against the building structure.

[0124] Also herein described is scaffolding along yet with walkways spaced from a building structure such scaffolding being characterised in having nodal features used in two ways (1) to at least in part support bracing, walkways or both of the scaffolding, and (2) directly or indirectly to at least in part support a guard to the space to the building structure.

[0125] Preferably, if the guard is directly supported, it has been inserted from above, and if the guard is indirectly supported, supports into which the guard has been inserted from above were themselves inserted from above.

[0126] Preferably the bracing and/or walkways were themselves inserted from above.

[0127] Also herein described is, in a scaffolding structure, the use of nodal rosettes (i) to assist tying of at least rear vertical standards or standard assemblies in a fixed interrelationship using bracing members and (ii) to proximally locate hinges of a fringe structure.

[0128] Other aspects of the invention may become apparent from the following description which is given by way of example only and with reference to the accompanying drawings.

[0129] As used herein the term "and/or" means "and" or "or", or both.

[0130] As used herein "(s)" following a noun means the plural and/or singular forms of the noun.

[0131] The term "comprising" as used in this specification [and claims] means "consisting at least in part of". When interpreting statements in this specification [and claims] which include that term, the features, prefaced by that term in each statement, all need to be present but other features can also be present. Related terms such as "comprise" and "comprised" are to be interpreted in the same manner.

[0132] The entire disclosures of all applications, patents and publications, cited above and below, if any, are hereby incorporated by reference.

[0133] This invention may also be said broadly to consist in the parts, elements and features referred to or indicated in the specification of the application, individually or collectively, and any or all combinations of any two or more of said parts, elements or features, and where specific integers are mentioned herein which have known equivalents in the art to which this invention relates, such known equivalents are deemed to be incorporated herein as if individually set forth.)

BRIEF DESCRIPTION OF THE DRAWINGS

[0134] The invention will now be described by way of example only and with reference to the drawings in which:

[0135] FIG. 1 is a perspective view of prior art scaffolding,

[0136] FIG. 2 is a side view of scaffolding adjacent a structure showing the guard in a deployed condition,

[0137] FIG. 3 is a perspective view of FIG. 2,

[0138] FIG. 3a is a side view of a compliant end flap closing a gap between a wall and guard,

[0139] FIG. 4 is a close up view of region A of FIG. 3,

[0140] FIG. 5 is a side view of the scaffolding structure showing the guard in a stowed condition,

[0141] FIG. 6 is a perspective view of FIG. 5,

[0142] FIG. 7 is a close up view of region B of FIG. 6,

[0143] FIG. 8 is a perspective view of a guard showing further detail of its construction and its relationship of the hinge arrangement,

[0144] FIG. 9 is a perspective view of part of the hinge arrangement,

[0145] FIG. 9b is a perspective view of a rosette that may be permanently associated to or with a standard of the scaffold structure,

[0146] FIG. 10 is a side view of scaffolding adjacent a building structure including the use of a mat or other cover element provided over at least part of the guard and its adjacent scaffolding platform,

[0147] FIG. 11 is a perspective view of a scaffold structure with an associated guard including further provision for preventing debris from falling off the structure,

[0148] FIG. 12 is a side view of FIG. 11,

[0149] FIG. 13A is a perspective view of a guard with surround upright members,

[0150] FIG. 13B shows a plan view of a compliant distal edge flap between a misalignment of a scaffold structure and adjacent wall,

[0151] FIG. 13C is a perspective view of another embodiment of FIG. 13A,

[0152] FIG. 14 shows a side view of a FIG. 2 with a tether,

[0153] FIG. 15A is a perspective view of FIG. 11 in a stowed position, and

[0154] FIG. 15B is a side view of FIG. 15A.

DETAILED DESCRIPTION OF THE INVENTION

[0155] With reference to FIGS. 2 and 3 there is shown scaffolding 1000. The scaffolding 1000 comprises of a scaffold structure 1001 that may consist of a plurality of vertically erected standards 10. These standards may be made from a metal such as steel or aluminium or an aluminium alloy. They may alternatively be made from a composite like material. In the preferred form the standards are made from steel tubes and have disposed along their lengths at regular intervals, features that are herein refer to as rosettes 52.

[0156] The rosettes allow for horizontal ledgers 20 to become secured to and span between adjacent standards. Ledgers may be placed at regular height intervals to span between adjacent standards so as to create a lattice like structure of interconnecting scaffolding components to create a relatively rigid scaffold structure 1001. The rosettes include a plurality of slots 53 as seen for example in FIGS. 4 and 9b into which an engaging member 73 associated with and at the distal ends of each ledger can downwardly be located and become secured. The engaging members 73 are preferably tapered so that a rigid connection can be established between ledgers 20 and standards 10 at a rosette 52.

[0157] Where desired, a working platform 30 can be associated with the scaffold structure 1001. The working platform is preferably elongate and positioned to be parallel to and extend along at least part of the adjacent wall of the building. The working platform may be supported by a plurality of ledgers 20 and/or standards 10 and in a manner to provide a substantially horizontal surface on which people are able to walk and be appropriately supported during use of the scaffolding. The platform 30 may be conveniently placed onto a ledger 20 by the use of a hook like arrangement 61 as shown in FIG. 4. In the preferred form the platform spans between and is edgewise contiguous with adjacent ledgers 20 at a particular level of the scaffolding structure.

[0158] In the preferred form the scaffold structure is erected adjacent or to be adjacent part of a building structure such as a wall 4. The scaffold structure preferably extends in an elongate direction L-L that is substantially parallel to the wall of the building structure to which it is adjacent. The scaffold structure is of a given width W and may be spaced from the adjacent wall 4 at a substantially even distance G. The distance G signifies a gap 2 that exists between the scaffold structure 1001 and the wall 4. Regularly spaced ties may extend between and to connect the scaffold structure and the building structure so that the scaffold structure can gain lateral support from the adjacent building.

[0159] In the preferred form the/or each platform 30 spans a substantial part if not all of the width W of the scaffold structure. The edge 63 of the platform is hence substantially spaced at a distance G from the wall adjacent the scaffold structure 1001. The edge 63 is preferably straight and preferably contiguous an adjacent ledger of the scaffold structure 1001. The platform 30 as well as providing a support surface for workers also provides a barrier for objects from falling.

[0160] The platform 30 itself does not prevent objects from falling through the space between the scaffold structure 1001 and the wall 4. Ie thorough the gap. To prevent objects such as debris, tools, building components or other items from so falling any great or harmful distance, associated with the scaffold structure 1001 is a guard 40. The guard 40 is preferably elongate in nature. It is hence longer in the L-L direction than it is wide in the direction lateral thereto. The guard is preferably of a width in such a lateral direction that is greater

than the gap G between the scaffold structure 1001 and the outer scaffold structure facing surface of the wall 4.

[0161] The guard is adapted and configures to span the gap 2 between the scaffold structure facing surface of the wall 4 and the scaffold structure 1001.

[0162] The guard is able to bear against the scaffold structure facing surface of the wall 4 as shown for example in FIG. 2. In this, deployed, condition the guard is able to arrest objects from falling further through the gap between the scaffold structure 1001 and the wall 4.

[0163] The guard 40 preferably includes a primary panel 65 or deck. The primary panel may be of a solid material or may alternatively be of a mesh or the like and provides the most substantial part of the barrier to debris falling beyond the guard through the gap 2. The primary panel 65 is preferably of a solid material and preferably includes an upwardly facing surface 66. It is this surface that objects falling from above are likely to hit.

[0164] The construction of the guard 40 may be a number of different materials or constructions. In one embodiment the guard 40 is of a similar type of constructions to the working surface 30 where it is comprised of a laminated or timber board constrained or ordered by a metal periphery. In one embodiment the guard is purely timber or purely metal with complimentary openings 48 drilled into the side of it to accept hinge pins 74 as described later. In other embodiments the guard 40 may be of a screen-like character such as a tubular metal periphery with a fill such as netting or wire gauze. In other embodiments the guard 40 may be opaque, or translucent or transparent.

[0165] In the preferred form the guard is placed in position to be contiguous the upwardly facing surface of an adjacent platform 30 of the scaffold structure 1001. Together with the adjacent platform 30 the guard can create a substantially continuous surface to arrest debris falling therebelow.

[0166] The guard 40 has a proximal edge 67, as shown in FIG. 8, when in use is positioned proximal most the scaffold structure 1001. An extension at this proximal edge 67 may be an optional proximal flap 68. This optional proximal flap 68 may articulate or hinge or be flexibly disposed and extend from the primary panel 65 so as to contact, partially overlap or abut the front edge 33 of the working platform 30.

[0167] This optional proximal flap 68 can hence close any gap that may exist between the guard and the working platform 30.

[0168] The guard also has a distal edge 69 to be disposed when in the deployed condition of the guard, adjacent the scaffold structure facing surface of the adjacent wall 4. Provided at the distal edge 69 may be a compliant member 70 that may for example be of a flexible material such as a rubber flap or compressible foam or the like that is able to rest or come to rest against the scaffold facing surface of the wall 4. This is for example seen in FIG. 3a.

[0169] In some situations where the distal edge 69 of the primary panel is not perfectly parallel with the scaffolding facing surface of the wall 4 a gap at one or towards one end of the primary panel may exist as shown in FIG. 13B. The optional and compliant distal flap 70 of the guard can help bridge any such gap that may exist between the primary panel and the scaffolding facing surface of the wall 4. The distal flap 70 may extend laterally upwardly from the distal edge 69 of the primary panel and preferably extends therefrom at the upwardly facing surface 66.

[0170] These compliant flaps prevent any small item from slipping through any gaps between the guard 40 and the building 4 or the guard 40 and the working surface 30. These gaps may be due to any variances or variations of distance of the gap between the working surface 30 and the building 4.

[0171] The guard 40 further comprises compliant end flaps 80 at the elongate ends as shown in FIG. 8. The end flaps 80 are able to be joined or are able to integrate or compliment other guards 40 that may be adjacent to the guard 40 in the elongate direction L-L. This allows large tracts of scaffolding 1000 to be used along a building 4 side and allow the working guards to form a complete barrier to the gap 2.

[0172] In one embodiment a large rubber mat or cover can be laid down on top of the guard 40 or at least joined to the guard 40 to cover the entire guard 40 from the building 4 to the working surface 30 as shown in FIG. 12 by the numeral 60.

[0173] In one embodiment the scaffold structure may comprise upright borders 71 about the working surface 30 edges as shown in FIGS. 11 and 12. The borders 70 catch any debris that was caught by the guard 40 that may get directed to the working surface 30 should any of the debris have momentum to carry it over the edge or periphery of the working surface 30. FIGS. 15A and 15B show this embodiment in a stored position including upright borders on the guards 40 as further described below.

[0174] In one embodiment the borders 70 are hingeable at a lower most edge which allows them to be folded down when not in use. The borders 70 may have a similar working mechanism to the guard 40 in regards to hinging, or they may be rigid with respect to the working surface or standards.

[0175] Furthermore, the guard 40 comprises upright borders 81 about the panel 65 edges as shown in FIG. 13A.

[0176] The upright borders 81 may only be at one end of the panel 65 as shown in FIG. 13C. This embodiment may be used in instances where the guard 40 abuts other guards. Furthermore, there may not be an upright border between the panel 65 and the platform 30. This allows any debris caught by the guard 40 to be directed onto platform 30.

[0177] The guard 40 is preferably mounted or mountable to a scaffold structure 1001 in a manner to be moveable between a deployed condition as shown in FIG. 3 and a stowed condition as shown in FIG. 5. Being able to move the guard between these two conditions can allow for objects to be moved up and/or down through the gap 2 as and when desired.

[0178] In the preferred form the guard is hinged or otherwise articulated relative to the scaffold structure 1001. Such hinging or articulation occurs at or proximate the proximal edge 67 of the primary panel 65 of the guard 40. A hinge arrangement may be provided at multiple positions at the proximal edge 67 of the primary panel.

[0179] The hinge arrangement may come in the form of a hinge mount 72 which is able to locate at and be engaged by a rosette of a standard. In the preferred form the hinge mount 72 includes a tapered engaging member 73 as previously described that can locate into a slot 53 of a rosette.

[0180] The hinge mount 72 may also present a hinge pin 74 that is able to define the hinge axis 42 for the guard. In the preferred form the hinge pin 74 is able to locate at a hinge gudgeon which can be an orifice, bore or opening 48. In other embodiments the gudgeon can be an open hook or U shape.

[0181] In one embodiment the hinge arrangement is part of the working surface 30 or the scaffold structure. In another

embodiment the hinge arrangement is clamped to a standard 10 or ledger 20 as a separate assembly from the scaffold structure.

[0182] In other embodiments the scaffolding may comprise a tray (not shown) which can contain the proximal edge 67 of the guard 40 to prevent the guard 40 from translating in a downwards direction. The tray restricts the guard 40 from moving in a downward or rearward direction away from the wall 4.

[0183] Due to the hingeable nature of the guard 40 different width gaps 2 may be accommodated. Should a small gap exist, the platform needs only pivot a small angle from the stowed position to a deployed position. Should a larger gap exist, the platform needs to pivot a larger angle from the stowed position to a deployed position. Preferably the platform would not pivot past 90 degrees from the stowed position.

[0184] In one embodiment, the guard 40 pivots or moves in the range of 90 degrees from the working surface down to the horizontal plane of the working surface in the direction towards the wall 4.

[0185] In alternative embodiments the guard 40 may go beyond and below the horizontal plane of the working surface, in these embodiments the guard is designed to either direct debris towards the building so it can be caught between the platform 40 and the building 4 or at least it can be directed to the edge of the building 4 so debris falls away from the scaffolding. In this embodiment the guard comprises a contact mechanism to prevent the platform from pivoting past the desired angle, or from pivoting about until the platform is 180 degrees from its stowed position.

[0186] In a further embodiment the guard 40 is tethered by a tether 90 at or towards its distal edge 69 back to the scaffold structure to prevent the guard from over rotating as shown in FIG. 14.

[0187] Installation of the guard 40 may be undertaken whilst the scaffold structure 1001 is in the erected position. In this instance the guard 40 may be raised up from the ground and installed at its desired location. In other embodiments the guard 40 is integral or already attached to the scaffold structure or working surface 30 before the scaffold structure 1001 is completely erected. The guards 40 may be removed from their installed position and moved to a higher position as the scaffold structure grows higher and workers work at higher levels.

[0188] Where in the foregoing description reference has been made to elements or integers having known equivalents, then such equivalents are included as if they were individually set forth.

[0189] Although the invention has been described by way of example and with reference to particular embodiments, it is to be understood that modifications and/or improvements may be made without departing from the scope or spirit of the invention.

[0190] In addition, where features or aspects of the invention are described in terms of Markush groups, those skilled in the art will recognise that the invention is also thereby described in terms of any individual member or subgroup of members of the Markush group.

1. Scaffolding comprising,

a scaffold structure, assembled next to yet spaced from an adjacent face of a building structure with a gap therebetween, comprising:

- a. a plurality of standards extending vertically adjacent the structure,
 - b. horizontal ledgers extending between standards and tying the standards in a fixed interrelationship, and
 - c. a platform supported from the standards and/or the ledgers thereby to be conferred a vertical support in a substantially horizontal disposition; and
- a guard, as a lateral extension to the platform, configured to hinge or otherwise articulate downwardly from the scaffold structure to bear onto the face of the building structure to at least partially span across the gap.
2. Scaffolding as claimed in claim 1, wherein the guard is configurable between (i) a rotationally secure stowed condition proximal more the scaffold structure and (ii) a deployed position that is rotationally free save for being prevented from rotating beyond where the guard comes to bear onto the building structure.
3. Scaffolding as claimed in claim 2, wherein the guard, when in the deployed condition, comprises an upwards facing face contiguous with at least one or more of the platform and the adjacent face of the adjacent building.
4. Scaffolding as claimed in claim 1, wherein the guard is substantially rectangular in plan shape and has its two major parallel edges positioned parallel the adjacent face of the building.
5. Scaffolding as claimed in claim 1 wherein each said standard includes a plurality of spaced apart rosettes at each of which at least one ledger is able to become removable secured to a said standard, and wherein the guard is supported in a hinged manner from a rosette.
6. Scaffolding as claimed in claim 5 wherein said guard includes a hinge assembly that includes a member that is insertable into a slot of a rosette of a said standard to be removably engageable and become supported with a standard.
7. Scaffolding as claimed in claim 1 where the guard includes a flexible lip that extends in a manner engaging the face of the building in a compliant manner to prevent objects from falling beyond the guard at said face.
8. Scaffolding as claimed in claim 1 wherein the guard includes at least one upstand provided at at least one peripheral edge of the guard to prevent objects from moving off the guard thereat.
9. Scaffolding comprising a scaffold structure of a plurality of spaced apart upright supports and a platform inwardly of the upright supports to be erected adjacent yet spaced from a building structure and a fringe guard hingedly supported by said scaffold structure and deployed or deployable to extend outwardly of the upright supports from a stowed condition upwardly of its hinge axis to span between the building structure and the scaffold structure.
10. Scaffolding as claimed in claim 9, wherein the fringe guard is removably engageable to the upright supports via downwardly insertable projections.

11. Scaffolding as claimed in claim 9, wherein the fringe guard comprises flexible members about its periphery configured to cover a gap/s between the fringe guard and one more selected from a) the platform, b) the building structure and c) another adjacent fringe guard.

12. Scaffolding as claimed in claim 9 wherein the platform comprises borders extending above and substantially perpendicular to the uppermost surface of the platform about at least part of the platform periphery.

13. Scaffolding as claimed in claim 9 wherein the guard comprises a deck and borders extending above and substantially perpendicular to the uppermost surface of the deck at at least part of the guard periphery.

14. A guard for closing a gap down which items might fall between a scaffold structure and an adjacent building, said guard being panel or platform like in nature with a longitudinal axis to run along the gap horizontally, the lateral extremities of the guard being adapted (1) proximally to the scaffolding, to engage complementary said scaffold structure from above, and (2) distally of the scaffold structure to bear onto the building structure.

15. A guard as claimed in claim 14 wherein the guard is configurable between a rotationally secure stowed condition and a rotationally free deployed position.

16. A guard as claimed in claim 15 wherein the guard in the deployed position is configured to comprise an upwards facing face contiguous from the scaffolding, across the gap, to the adjacent face of the adjacent building.

17. A guard as claimed in claim 15 wherein the guard is removably engageable with the scaffold structure via downwardly insertable projections which engage with the complementary features of the scaffold structure.

18. A guard as claimed in claim 17 wherein the downwardly insertable projections comprise pintles to engage with complementary orifices on the guard, that act together to form a hinge parallel the longitudinal direction of the gap.

19. A guard as claimed in claim 17 wherein nodal rosettes provide by vertically extending standards of the scaffold structure are used (i) to assist tying of at least vertical standards or standard assemblies of the scaffolding in a fixed interrelationship using bracing members and (ii) to locate and engage the downwardly insertable projections.

20. A guard as claimed in claim 14 wherein flexible members are disposed at the guard periphery configured to cover gap/s between the guard and one or more selected from a) the scaffolding, b) the building and c) another adjacent guard.

21. A guard for closing a gap down which items might fall between a scaffold structure and an adjacent building, said guard being deck like in nature with a longitudinal axis to run along the gap horizontally, the lateral extremities of the guard being adapted (1) proximally to the scaffolding, to be supported by said scaffold structure in an pivotal manner, and (2) distally of the scaffold structure to pivotally come to bear onto the building structure.

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