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(57) **ABSTRACT**

A safety platform scaffold apparatus is provided having a plurality of wall-supportable units, each with a floor support portion. A work platform is removably mountable on the floor support portions by suitable connectors affixed to the opposed ends of the platform. The opposed connectors are complimentary to each other so that they can be nested together on the same floor support portion thereby enabling a multiplicity of wall supportable units to be mounted on a wall with juxtaposed side-by-side platforms defining a smooth, flat, continuous work surface and wherein the platforms interlock with each other and the wall-supportable unit floor portions.

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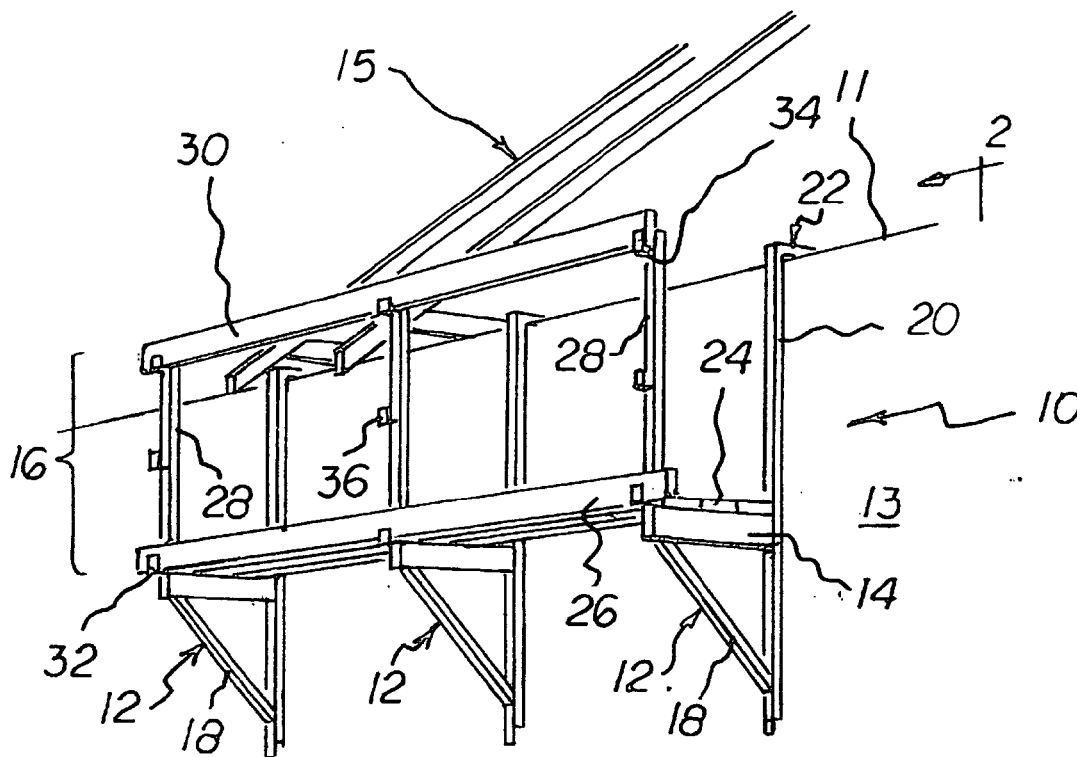


FIG. 1

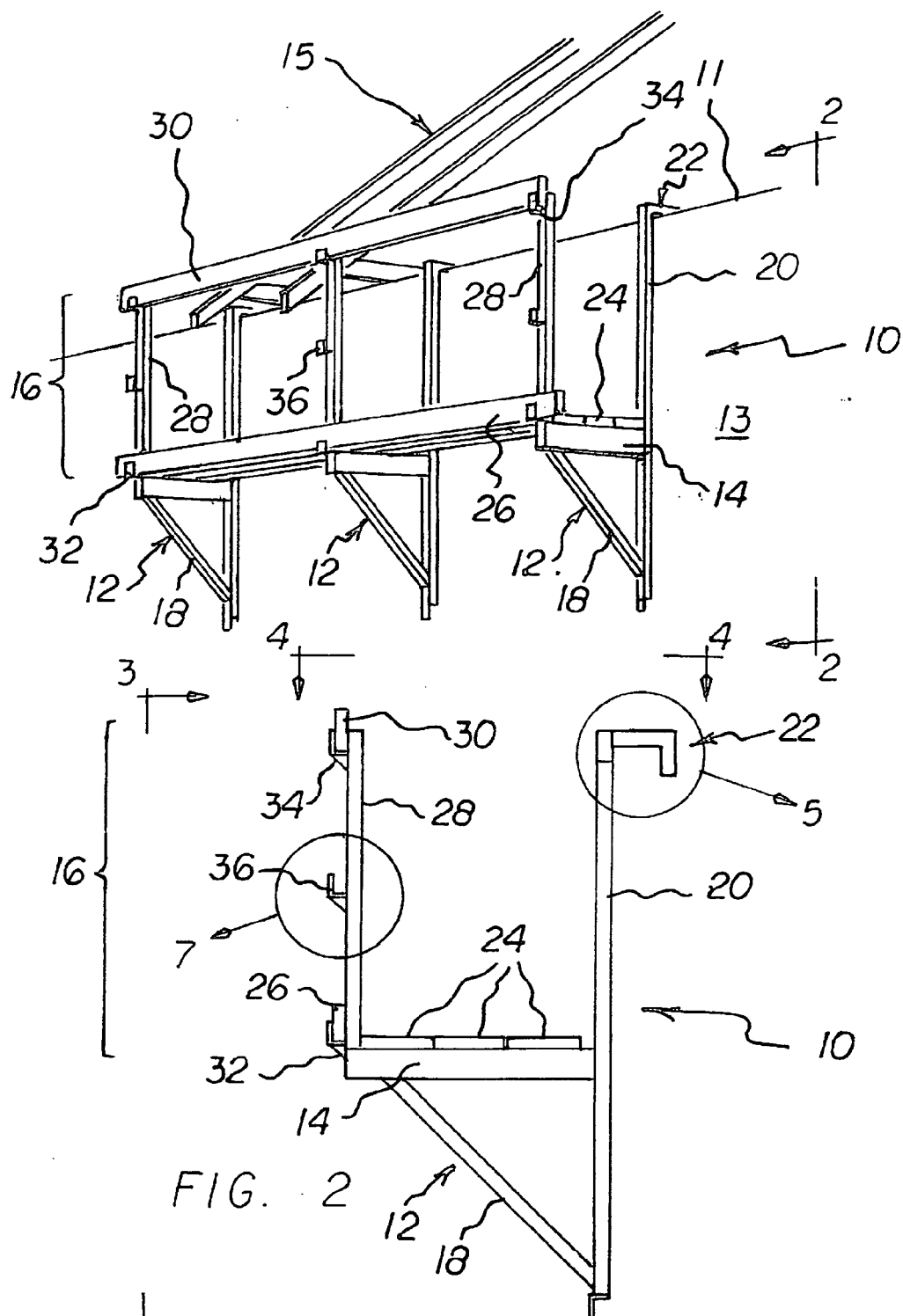
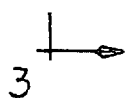
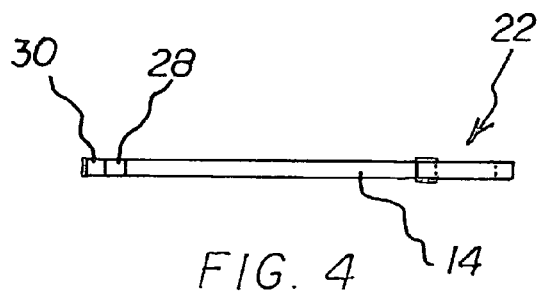
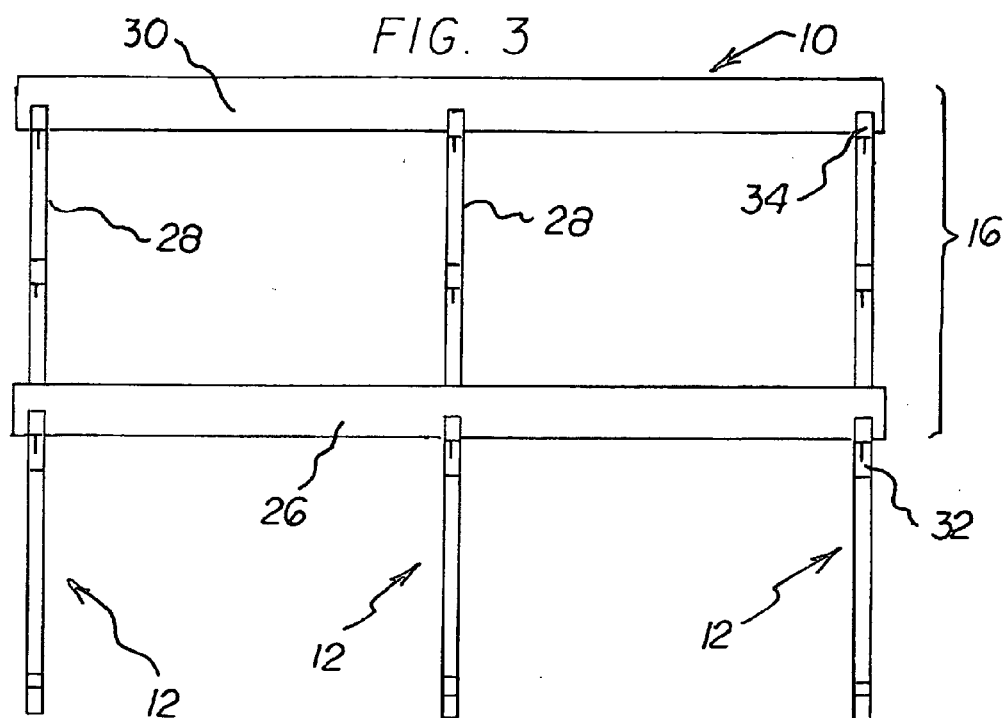


FIG. 2





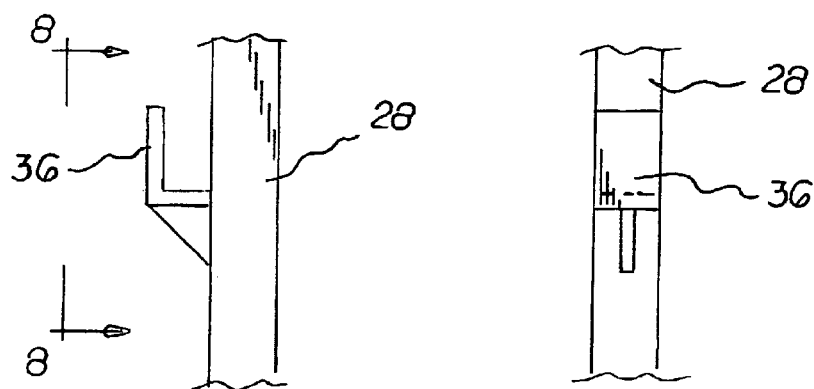
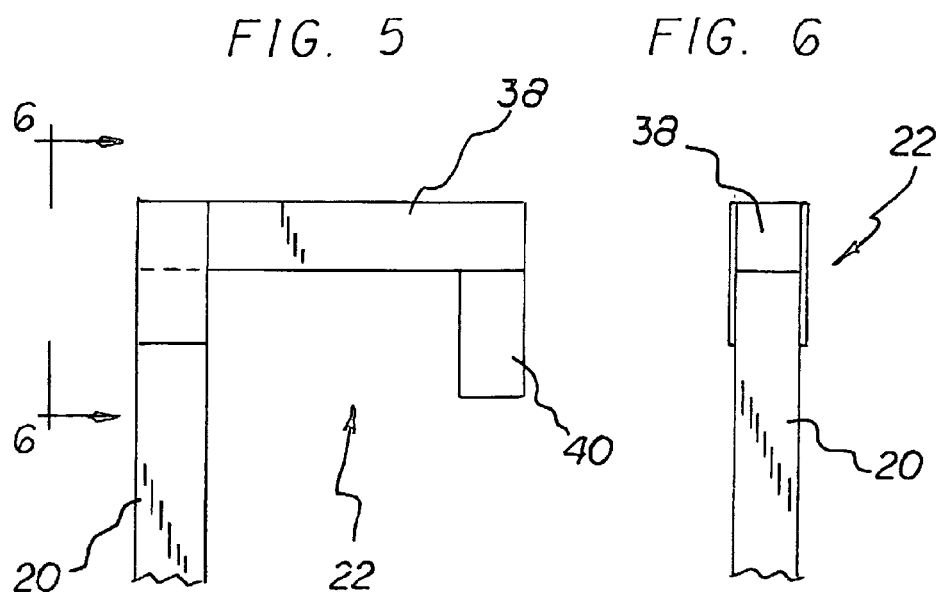
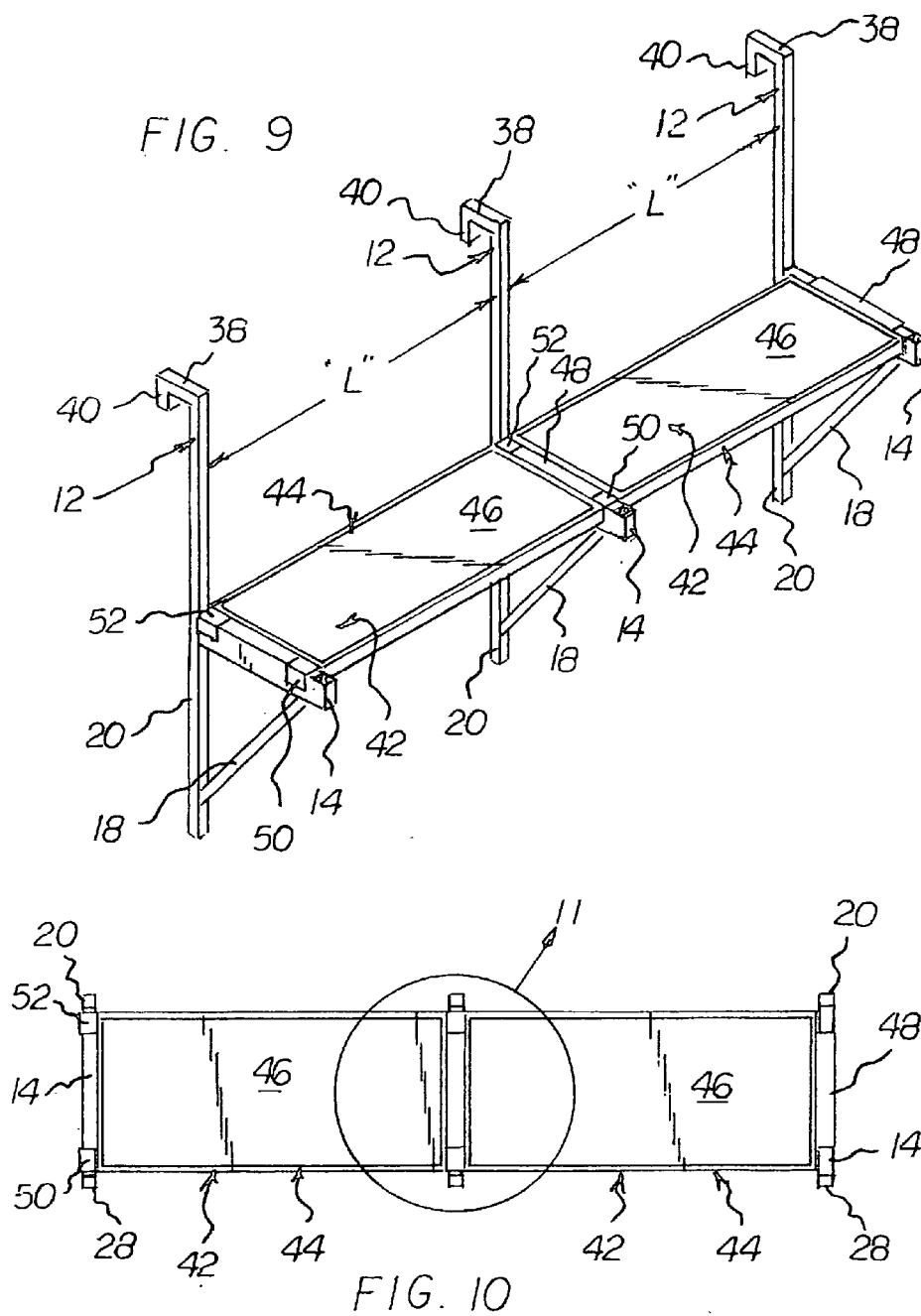
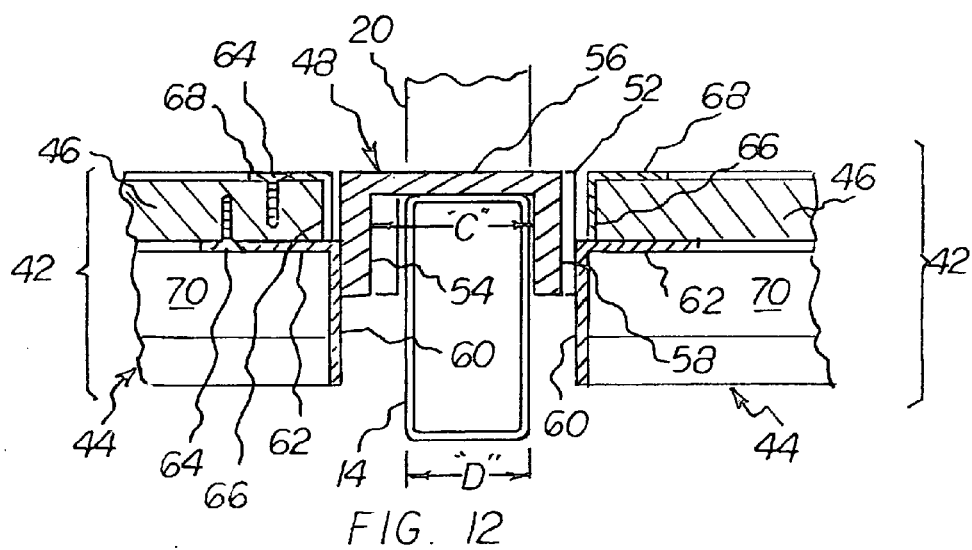
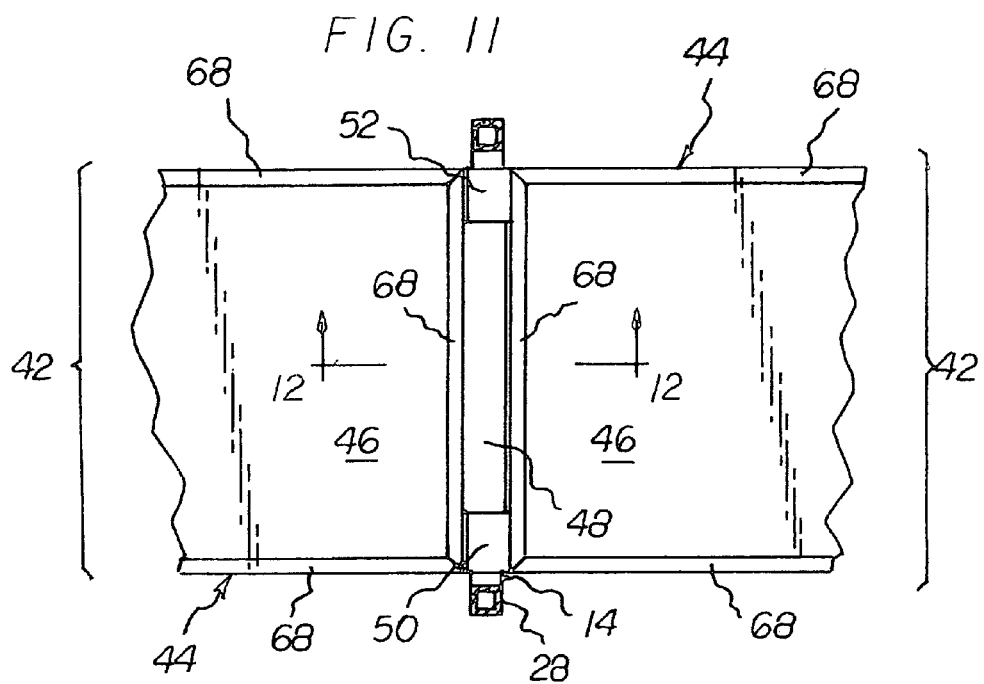
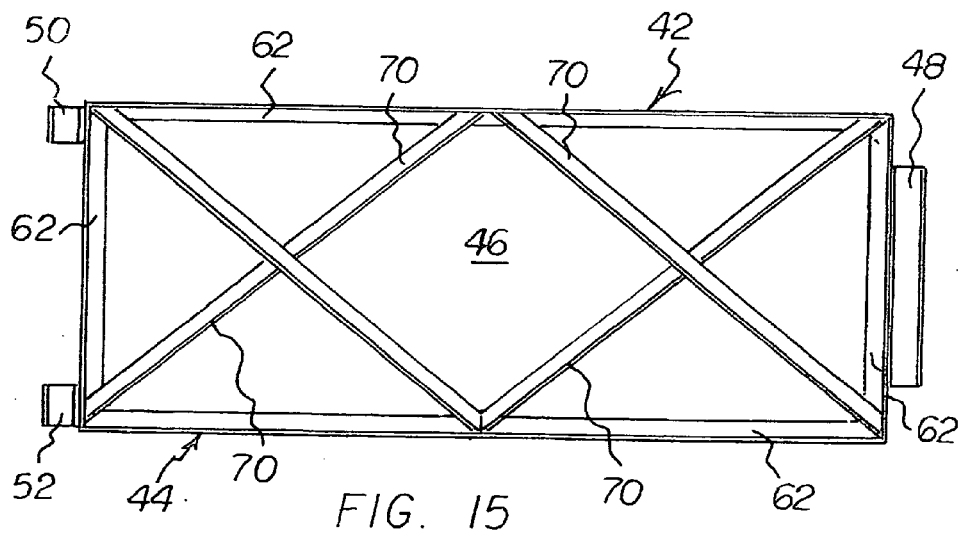
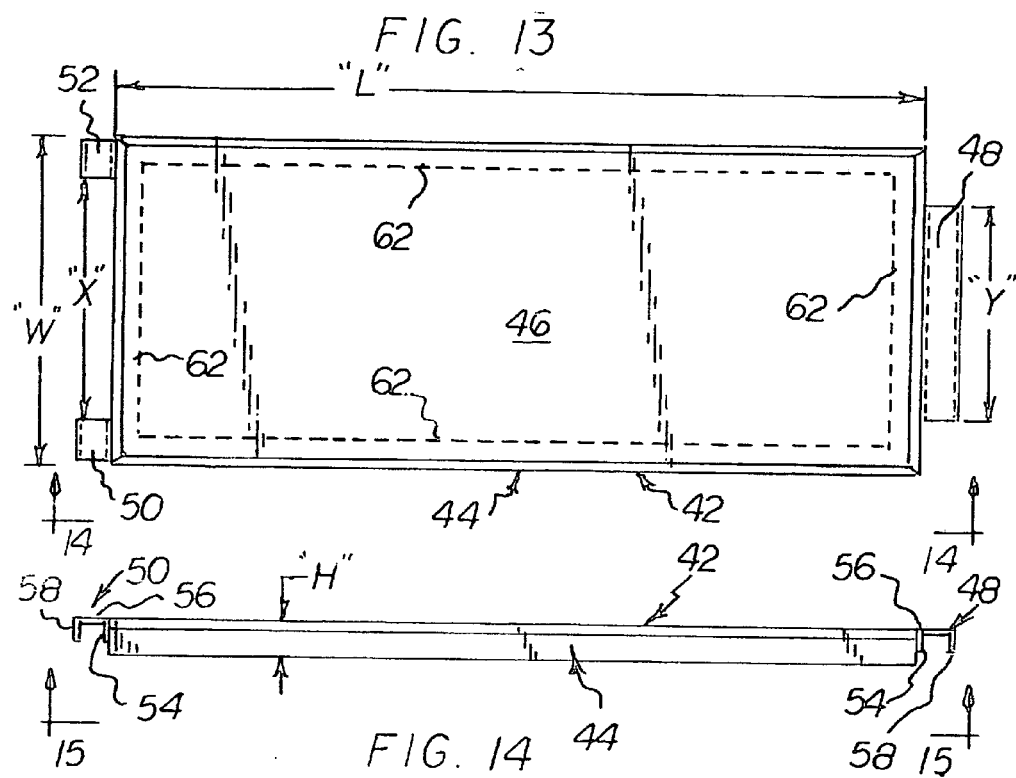


FIG. 7

FIG. 8







SAFETY PLATFORM SCAFFOLD APPARATUS

RELATED APPLICATION

[0001] The present application is a continuation-in-part of my prior pending application Ser. No. 14/121,567, filed Sep. 19, 2014, entitled "Safety Platform Scaffold Apparatus," and claims priority based upon said prior, pending application for all purposes. By this reference, my prior pending application Ser. No. 14/121,567 hereby is incorporated in and made part of this application.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates generally to scaffolds, and, more particularly, to scaffold especially adapted for a person who performs framing operations on a roof truss.

[0004] 2. Description of the Prior Art

[0005] It is well known in the building construction art that framers, who install roof trusses on the tops of vertical walls, are subject to potential falls and other injuries because they cannot readily tie themselves to the top of a wall upon which a roof truss is installed. In this respect, it would be desirable if a safety platform scaffold apparatus could be provided that keeps those installing roof trusses safe in a number of ways that are not known in the prior art.

[0006] Still other features would be desirable in a safety platform scaffold apparatus. For example, it would be readily assembled and disassembled at a work site. Also, it would be relatively light and easy to lift and lower, with respect to the top of a wall.

[0007] Examples of prior art safety scaffolds can be seen in U.S. Pat. No. 6,003,631 (Knauth); and U.S. Patent Application No. 2002/0139614 (Volkman).

[0008] Neither of these prior art teachings however discloses or suggests a safety platform scaffold apparatus which has the following combination of desirable features: (1) provides a safety platform scaffold apparatus that keeps those installing roof trusses safe in a number of ways that are not known in the prior art; (2) provides a safety platform scaffold apparatus that can be readily assembled and disassembled at a work site; (3) provides a safety platform scaffold apparatus that is relatively light and easy to lift and lower, with respect to the top of a wall, and (4) provides a safety platform that includes a unique prefabricated floor panel member that is capable of being securely engaged in place on a pair of wall supporting members to provide enhanced strength and stability to the scaffold apparatus assembly. The foregoing desired characteristics are provided only by the unique safety platform scaffold apparatus of the present invention as will be made apparent from the following description thereof. Other advantages of the present invention over the prior art also will be rendered evident.

SUMMARY OF THE INVENTION

[0009] To achieve the foregoing and other advantages, the present invention, briefly described, provides a safety platform scaffold apparatus for being supported by a wall which has a wall top. The apparatus includes a plurality of wall-supportable units for being supported by the wall. A plurality of floor members are supported by the wall-supportable units, and a fence unit is connected to the plurality of wall-supportable units.

[0010] With the apparatus, a worker can stand on the floor members with the wall-top engagement portions secured on the top of the wall. In this way, the worker is in a safe location when a roof truss is lowered onto the wall.

[0011] Preferably, each of the wall-supportable units includes a wall-contacting riser portion. A wall-top engagement portion is connected to the wall-contacting riser portion. A floor support portion is connected to the wall-contacting riser portion.

[0012] Preferably, each of the wall-top engagement portions includes a top wall-contacting support portion which is connected to the wall-contacting riser portion, and a downwardly extending stop portion is connected to the top wall-contacting support portion.

[0013] Also, preferably, each of the wall-supportable units includes a reinforcement strut which is connected between a bottom portion of the wall-contacting riser portion and a bottom portion of the floor support portion.

[0014] Preferably, the fence unit includes a fence riser portion supported by the floor support portion. A fence-riser-to-fence-bottom connector is connected to the fence riser portion. A fence bottom portion is received in the fence-riser-to-fence-bottom connector. A fence-riser-to-fence-top connector is connected to the fence riser portion, and a fence top portion is received in the fence-riser-to-fence-top connector.

[0015] The fence riser portion can further include a middle connector between the fence-riser-to-fence-top connector and the fence-riser-to-fence-bottom connector.

[0016] In an alternatively preferred form of the invention, a unique pre-fabricated floor panel member is provided for use with a pair of wall-supportable units, and which includes opposed-end-connector members for lockingly engaging the floor support portions connected to the wall-contacting riser portions of the wall-supportable units, respectively.

[0017] The above brief description sets forth rather broadly the more important features of the present invention in order that the detailed description thereof that follows may be better understood, and in order that the present contributions to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will be for the subject matter of the claims appended hereto.

[0018] In this respect, before explaining preferred embodiments of the invention in detail, it is understood that the invention is not limited in its application to the details of the construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood, that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

[0019] As such, those skilled in the art will appreciate that the conception, upon which disclosure is based, may readily be utilized as a basis for designing other structures, methods, and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

[0020] It is another object of the present invention to provide a new and improved safety platform scaffold apparatus which may be easily and efficiently manufactured and marketed.

[0021] It is a further object of the present invention to provide a new and improved safety platform scaffold apparatus which is of durable and reliable construction.

[0022] An even further object of the present invention is to provide a new and improved safety platform scaffold apparatus which is susceptible of a low cost of manufacture with regard to both materials and labor, and which accordingly is then susceptible of low prices of sale to the consuming public, thereby making such safety platform scaffold apparatus available to the buying public.

[0023] Still yet a further object of the present invention is to provide a new and improved safety platform scaffold apparatus that keeps those installing roof trusses safe in a number of ways.

[0024] Still another object of the present invention is to provide a new and improved safety platform scaffold apparatus that can be readily assembled and disassembled at a work site.

[0025] Yet another object of the present invention is to provide a new and improved safety platform scaffold apparatus that is relatively light and easy to lift and lower, with respect to the top of a wall.

[0026] Still yet another object of the present invention is to provide a new and improved safety platform scaffold apparatus that has all of the advantages of the prior art and none of the disadvantages thereof.

[0027] Yet still another object of the present invention is to provide a new and improved safety platform scaffold apparatus that includes an alternatively preferred unique prefabricated floor panel member capable of being securely engaged in place on a pair of wall supporting members to provide enhanced strength and stability to the scaffold apparatus assembly.

[0028] These together with still other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029] The invention will be better understood and the above objects as well as objects other than those set forth above will become more apparent after a study of the following detailed description thereof. Such description makes reference to the annexed drawing wherein:

[0030] FIG. 1 is a perspective view showing a preferred embodiment of the safety platform scaffold apparatus of the invention installed on the top of a wall that has received a roof truss.

[0031] FIG. 2 is an enlarged side view of the embodiment of the safety platform scaffold apparatus shown in FIG. 1 taken along line 2-2 of FIG. 1.

[0032] FIG. 3 is a further enlarged front view of the embodiment of the safety platform scaffold apparatus of FIG. 2 taken along line 3-3 thereof.

[0033] FIG. 4 is a top view of the embodiment of the invention shown in FIG. 2, taken along line 4-4 thereof.

[0034] FIG. 5 is an enlarged view of the circled region 5 shown in FIG. 2.

[0035] FIG. 6 is a front view of the portion of the invention shown in line 6-6 in FIG. 5.

[0036] FIG. 7 is an enlarged view of the circled region 7 shown in FIG. 2.

[0037] FIG. 8 is a front view of the portion of the invention shown by line 8-8 in FIG. 7.

[0038] FIG. 9 is a perspective assembly of the safety platform scaffold apparatus of the invention wherein first and second prefabricated floor panel members are installed a series of three wall-supportable units.

[0039] FIG. 10 is a plan top view of the assembly of FIG. 9.

[0040] FIG. 11 is an enlarged plan top view of a portion of the assembly of FIG. 10 denoted by circle 11 in FIG. 10.

[0041] FIG. 12 is a cross-sectional view taken along line 12-12 of FIG. 11.

[0042] FIG. 13 is an enlarged plan top view of one of the first or second pre-fabricated floor panel members of FIGS. 9 and 10.

[0043] FIG. 14 is an elevational side view taken along line 14-14 of FIG. 13.

[0044] FIG. 15 is a plan bottom view taken along line 15-15 of FIG. 14.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0045] With reference to the drawings, a new and improved safety platform scaffold apparatus embodying the principles and concepts of the present invention will be described.

[0046] Turning to FIGS. 1-8, there is shown a first preferred embodiment of the safety platform scaffold apparatus of the invention generally designated by reference numeral 10. In each of the figures, reference numerals are shown that correspond to like reference numerals that designate like elements shown in other figures.

[0047] In the first preferred embodiment, safety platform scaffold apparatus 10 is provided for being supported by a wall 13 which has a wall top 11. The apparatus includes a plurality of wall-supportable units 12 for being supported by the wall 13. A plurality of floor members 24 are supported by the wall-supportable units 12, and a fence unit 16 is connected to the plurality of wall-supportable units 12.

[0048] Preferably, each of the wall-supportable units 12 includes a wall-contacting riser portion 20. A wall-top engagement portion 22 is connected to the wall-contacting riser portion 20. A floor support portion 14 is connected to the wall-contacting riser portion 20. In accordance with the invention, the wall top engagement portions 22 are used to removably hang the wall-supportable units 12 from the top 11 of the wall 13. The floor members 24 are supported by the floor support portions 14, substantially as shown in FIGS. 1 and 2. Floor members 24 preferably are in the form of conventional wooden boards by-side and of suitable longitudinal extent or length. Alternatively, the floor members 24 can be in the form of a one-piece removable platform, pre-fabricated of a suitable material such as plywood or aluminum, for example. As an alternative embodiment of the

invention, a preferred form of such a pre-fabricated one-piece removable platform will be described in more detail below.

[0049] With reference to FIG. 1, and in accordance with the invention, a worker (not shown) can stand on the floor members 24 with the wall-top engagement portions 22 secured on the top 11 of the wall 13. In this way, the worker is in a safe location when the roof truss 15 is lowered onto the wall 13. The elongated fence unit 16 prevents the worker from falling backward off the floor members 24. As will be explained in more detail below, the elongated fence unit includes removable fence members 26, 30.

[0050] Preferably, each of the wall-top engagement portions 22 includes a top wall-contacting support portion 38 which is laterally connected to the wall-contacting riser portion 20, and a downwardly extending stop portion 40 is connected to the distal extremity of the top wall-contacting support portion 38, substantially as depicted (FIGS. 2 and 5). Preferably, the top wall-contacting support portion 38 is connected to the wall-contacting riser portion 20 at a right-angle, and the downwardly extending stop portion 40 is connected to the distal extremity of the top-wall-contacting support portion 38 at a right angle.

[0051] Also, preferably, each of the wall-supportable units 12 further includes a reinforcement strut 18 which is diagonally connected between a bottom portion of the wall-contacting riser portion 20 and a bottom portion of the floor support portion 14, substantially as depicted (FIGS. 1 and 2).

[0052] Preferably, each fence unit 16 includes a respective fence riser portion 28 connected to and supported by the transversely or laterally extending floor support portion 14 with the fence riser portion being suitably securely attached thereto at the floor support portion's lateral extremity (FIG. 2). A fence-riser-to-fence-bottom connector 32 is connected to the fence riser portion 28. A fence bottom portion 26 is received in the fence-riser-to-fence-bottom connector 32. A fence-riser-to-fence-top connector 34 is connected to the fence riser portion 28, and a fence top portion 30 is received in the fence-riser-to-fence-top connector 34 (FIGS. 1 and 2). Preferably, each fence riser portion 28 further includes a middle connector 36 between the fence-riser-to-fence-top connector 34 and the fence-riser-to-fence-bottom connector 32. A corresponding middle fence portion (not shown) to avoid obfuscating the drawings) may be received in middle connector 36 in similar fashion.

[0053] Preferably, fence portions 26 and 30 (and middle fence portion, not shown) also can be in the form of conventional removable wooden boards of suitable length used in construction, such as 2x4's, 2x6's, or the like. The fence-riser-to-fence-bottom-connector 32, the middle connector 36, and the fence-riser-to-fence-top connector 34 can be in form of upwardly-facing right-angle brackets or hooks adapted to receive the respective top, middle and bottom fence, respectively (FIGS. 1-3). As depicted in FIG. 7, each of the connectors 32, 34, and 36 preferably is in the form of a right-angle bracket supported by a bottom gusset plate (unsigned).

[0054] An important feature of the invention is that the components of the safety platform scaffold apparatus disclosed herein can be made from relatively inexpensive and durable metal, wood or plastic materials. Thus, preferably, the wall-supportable units 12 can be of one-piece or unitary construction fabricated of light-weight, yet strong material such as aluminum, for example. Most particularly preferred

is a construction consisting of 2 in. by 2 in. extruded aluminum channel members welded or otherwise fastened together where the wall thickness of each channel member is about 1/8 in. The floor support portion 14 is intended to support the weight of floor members and workers, and accordingly, can have a larger cross-section, e.g. 2 in. by 4 in. Connectors 32, 34 and 36 can be welded in place or fastened by suitable screw fasteners or the like, in which case, the connectors can be separated so that the components are easily disassembled for storage and transport to and away from a work site.

[0055] In using the present invention in the field, all which is necessary is to hang a suitable plurality of wall-supportable units 12 on the top of a wall, for example, where roof trusses are being installed. In this position, each of the wall-top portions 22 and their corresponding top wall-contacting support portions 38 are in suitable supporting engagement relationship with the top portion of the wall (FIG. 1). The units 12 are spaced laterally from each other substantially as depicted in FIG. 1, and the plurality of elongated floor members 24 then is placed on the floor support portions 14. Next, the fence unit 16 is completed by placing the fence portions 26 and 30 into their corresponding connectors 32 and 34. If a middle fence portion is employed, it then also is similarly installed in its respective middle connector(s) 36.

[0056] As describe above in connection with the preferred embodiment of FIGS. 1-8, a plurality of conventional wooden boards 24 are laid side-by-side on the floor support portions 14 to provide a platform or floor for a worker standing on the scaffold assembly 10. Such floor members are loosely supported on the support portions 14, are uneven and non-smooth, can be moved about or broken easily, and do not add much stability to the scaffold assembly. To overcome these and other deficiencies, the alternatively preferred embodiment of FIGS. 9-15 provides a unique, pre-fabricated, one-piece, removable work platform or floor assembly of rigid, solid, relatively high-strength construction generally indicated by reference sign 42 which latter is adapted to be interlockingly engaged with respect to the riser support portions 14 on a pair of juxtaposed, laterally spaced apart wall supportable units 12 as will be explained in more detail below. It will be appreciated that with respect to the ensuing detailed description of the alternatively preferred embodiment of FIGS. 9-15, like reference signs are used to refer to like elements already shown and fully described in connection with FIGS. 1-8.

[0057] Turning to FIGS. 13-15, work or floor platform assembly 42 preferably comprises a quadrilaterally shaped, essentially planar member having a longitudinal or axial dimension or length "L," a transverse dimension or width "W," and a height or thickness dimension "H," sufficient to define an overall rectangular shape substantially as depicted (FIGS. 13-14). Preferably, work platform assembly 42 is formed of two components, namely a rectangularly-shaped frame 44 and a complimentary solid, flat, smooth, rectangularly-shaped platform member 46 supported within and by the frame 44 as will be explained in more detail below.

[0058] As viewed in FIGS. 13-15, a first or right-side end of frame 44 has a first platform-to-floor-support-portion connector 48 suitably affixed thereto whereas an opposed second or left-side end of frame 44 has second and third platform-to-floor-support-portion connectors 50, 52 suitably affixed thereto, substantially as depicted. Preferably, each of

connectors 48, 50 and 52 is a U-shaped channel member having an inside leg 54 rigidly and securely attached to frame 44, a top portion 56 substantially level with the top surface of platform 42, and an outer leg 58 at a right-angle to top portion 56 and spaced axially and longitudinally from inside leg 54 a distance "C" substantially as depicted, especially in FIG. 12. Connectors 48, 50 and 52 are substantially similar to each other, but for location and axial extent (length or extent parallel to transverse axis of platform). Thus, connector 48 has an axial extent or length "Y" (FIG. 13) and is located substantially symmetrically and centrally on the first or right-most end of platform assembly 42 with respect to the imaginary central longitudinal axis (not shown) of platform assembly 42 whereas second and third connectors 50, 52 comprise a spaced pair located on the opposed second end of platform assembly 42 proximal to the respective corners on the second end of the platform assembly with the connectors 50, 52 being spaced apart transversely with respect to each other as indicated by dimension "X," substantially as shown in FIG. 13. Also, it will be noted that connectors 48, 50 and 52 each is affixed in such a way to the platform frame 44 so that each has its open side facing downwardly with respect to the top surface of the platform assembly 42 (FIGS. 12 and 14).

[0059] In accordance with the invention, dimension "C," the transverse extent of the channel opening of each connector 48, 50, 52, is somewhat greater than the dimension "D," which latter is the transverse extent of each floor support arm 24 (FIG. 12) and in particular, the top surface thereof. By this arrangement, the connectors 48, 50, 52 can be engaged or "hooked" over and upon a corresponding floor support portion or arm 14 (FIGS. 9-12) in a secure manner. Toward this end, the inside leg 54 confronts the top side portion of floor support arm 14 and is capable of being in contacting engagement therewith, the top or middle portion 56 rests on and engages the top surface of floor support arm 14, and the outer leg 58 disposed at a right-angle to top portion 56 confronts and is adapted to contact and engage the opposed other top side portion of floor support arm 14. In effect, the outer downwardly-depending leg 58 of each connector 48, 50, 52 defines a "hook" in slight laterally sliding engagement with a corresponding floor support arm portion 14, substantially as depicted in FIG. 12. The foregoing construction facilitates easy installation on a floor support arm 14, or removal, by simply lowering or lifting the platform assembly relative to the floor support portions 14.

[0060] In accordance with yet another feature of the invention, each connector 48 on the first or right-most end of the platform frame 44 has an axial length or dimension "Y" somewhat less than the spacing "X" between the pair of connectors 50, 52 on the opposite or left-most end of platform frame 44. By this other arrangement, the connector 48 on a first end of a first platform assembly 42 can be nested or lie between a pair of connectors 50, 52 on a second end of a substantially identical second work platform assembly 42 in the manner substantially depicted in FIGS. 9-12, namely where the "long" connector 48 on the first end of the first assembly 42 is aligned with a spaced pair of straddling "short" connectors 50, 52 on a second end of the second platform assembly 42, and all such "aligned" connectors "hookingly" engage the corresponding top portion of floor support portion 14. It will be appreciated that owing to the foregoing dimensional relationship among parts called for by the present invention, a sufficient clearance space does

and will exist between the opposed sides of the top portion of the floor support portion 14 and the corresponding confronting sides 60 of frame 44 on each respective end of either the first or second platform assembly 42 to permit the outer or right-angle leg 58 of each connector 48, 50, 52 to be received in this clearance space whereby to establish the assembly and fit of the parts of the invention, substantially as depicted in FIGS. 11 and 12.

[0061] More specifically, the first and second platform assemblies 42 of FIGS. 9-12 are capable of being securely supported on first, second and third laterally spaced floor support portions 14 of the wall-supportable units 12 in relatively snug juxtaposed "interlocked" or "hooked" relation such that the connector 48 on the first platform assembly 42 is nested between and in axial alignment with the spaced pair of connectors 50, 52 on the second platform assembly 42 as these aligned connectors rest on and engage the floor support portion 14 of the second wall-supportable unit 12 (FIGS. 11-12). Similarly, the spaced pair of "short" connectors 50, 52 rests on and engages the floor support portion 14 of the first or left-most wall-supportable unit 12, and the "long" connector 48 rests on and engages the floor support portion 14 on the third or right-most wall-supportable unit. Thus, the arrangement of FIGS. 9 and 10, in accordance with the invention, where a pair of substantially identical work or floor platform assemblies 42 is shown in juxtaposed proximal relation with each other being supported on a series of three wall-supportable units 12 achieves a substantially stable, flat, smooth and continuous work surface spanning the transverse extent of the three wall supportable units 12 thereby defining a safety scaffold apparatus providing an improved safe workspace environment for the workers standing thereon.

[0062] Of course, it will be appreciated in accordance with the invention, that if desired, a pair of wall-supportable units 12 and a single work platform assembly 42 may be employed if such a "smaller-sized" safety scaffold is required. By the same token, it will be apparent to those of ordinary skill in the art that additional wall-supportable units 12 and additional work platforms 42 can be similarly added (i.e. interlocked or hooked together using meshing connectors 48, 50, 52 on each corresponding support portion 14) to the arrangement of FIGS. 9 and 10 if it is desired increase the transvers or axial extent of the scaffold apparatus beyond the exemplary three wall-supportable units 12 schematically shown in FIGS. 9 and 10.

[0063] In accordance with another feature of the invention, work platform 42 is fabricated to be of lightweight, durable, rugged construction so to withstand the rigors of a construction site over a long life cycle. Toward this end, and as mentioned briefly above, work platform assembly 42 comprises a platform member 46 preferably of rectangular shape supported in a complimentary preferably rectangularly-shaped frame 44. Frame 44, in turn, comprises a right-angle member defining a peripherally extending continuous annual (rectangular) side wall 60 and an integral inwardly extending lip (rectangular) 62 which latter serves as an annual continuous support for the peripherally extending continuous edge portions of work platform member 46. Preferably, frame 44 is fabricated of a strong, durable, lightweight metal such as aluminum, for example, whereas platform member 46 is fabricated of a relatively lightweight, yet strong, durable, and relatively inexpensive material such

as wood, for example, with a plywood board cut to a suitable size being particularly preferred.

[0064] As best seen in FIG. 12, platform member 46 suitably is rigidly secured to annular support lip 62 of frame 44 preferably by a multiplicity of peripherally spaced screw fasteners 64 or the like, each of which extends through the bottom of lip 62 into the underside of platform member 46 substantially as schematically depicted in FIG. 12. In order to protect the top and side edge portions of platform member 46 thereby extending its useful life, an annular peripherally extending (rectangular-shaped) right-angle trim-piece or coping (also preferably prefabricated of metal such as aluminum) can be provided having a side portion 66 and a top portion 68. Here again, the right-angle trim-piece or coping preferably can be suitably securely affixed to the peripheral edge of platform member 46 via multiple peripherally spaced screw fasteners 64 or the like, each of which extends through lip portion 68 into the top of the platform member 46, as also schematically depicted in FIG. 12.

[0065] Connectors 48, 50 and 52, each of which preferably is fabricated of suitable aluminum stock, suitably are attached to the side wall 60 of frame 44 at the appropriate ends of each platform assembly 42 as by welding for example, to assure that the top surface of top portion 56 of each such connector lies flat or level with the platform member top surface, substantially as depicted in FIG. 12. Finally, frame 44 preferably is reinforced suitably by affixing thereto, underneath annularly-extending support lip 62, a plurality of diagonally oriented reinforcing braces 70 in the manner substantially depicted in FIGS. 12 and 15. Braces 70 preferably also are fabricated of aluminum stock and welded in place in the disposition substantially as depicted.

[0066] It will be appreciated that work platform assembly 42 may be made in various sizes with respect to fitting wall supportable units 12 of complimentary size. Without limiting the present invention, and merely for the sake of illustration, a work platform assembly 42 according to the invention suitable for use with a wall-supportable unit 12 having a floor support portion or arm 14 with a "supporting" length of 30 in. and a cross-sectional size of 2 in. by 4 in. may have the following dimensions with reference to the drawings:

[0067] Longitudinal extent ("L"): 5 ft.-9 and $\frac{3}{4}$ in.

[0068] Width ("W"): 2 ft.-6 in.

[0069] Spacing between connectors 50, 52 (X"): 22 and $\frac{7}{8}$ in.

[0070] Width of connector 48 ("Y"): 21 in.

[0071] Wall thickness of U-channel connectors 48, 50, 52: $\frac{3}{8}$ in.

[0072] Width of connectors 50, 52: 2 in.

[0073] Axial extent of connectors from edge of frame 44: 3- $\frac{1}{2}$ in.

[0074] Frame height: 2 in.

[0075] Frame thickness: $\frac{1}{4}$ in.

[0076] Thickness and type of board 46: $\frac{3}{4}$ in. plywood

[0077] Weight of platform 42 employing aluminum frame and plywood

[0078] Board: 57 lbs.

[0079] To use the alternatively preferred work platform 42 of FIGS. 9-15 in the field, all which is necessary is to hang a pair of wall-supportable units 12 on the top of a wall, with each of the wall-top portions 22 and their corresponding top wall-contacting support portions 38 in suitable supporting engagement relationship with the top portion of the wall.

The pair of units 12 then are spaced laterally from each other a distance substantially the same as the length "L" of a work platform assembly 42 (FIG. 13). Then a platform 42 is placed on the floor support portions 14 with the connectors 48, 50 and 52 engaging the corresponding top portions of the floor support portions of the pair of wall-supportable units 12 (FIGS. 9, 11, and 12). If it is desired to increase the length of the scaffold apparatus 10 by adding another wall-supportable unit 12 and work platform 42, the other or third wall-supportable unit 12 is hung on the wall a distance "L" from the first pair of wall-supportable units and a second work platform assembly 42 then is emplaced on the second and third floor support portions 14 in the expanded array with the connectors 50, 52 on the second platform being positioned respectively on opposite sides of the connector 48 of the first platform 42 already engaged on the support portion 14 of the second wall-supportable unit, substantially as depicted in FIGS. 9-12. Additional work platform assemblies 42 can be added in similar fashion as desired to increase the length of a scaffold assembly 10 on a particular wall.

[0080] Finally, as before in connection with the first embodiment of FIGS. 1-8, the fence unit 16 is completed by placing the fence portions 26 and 30 into their corresponding connectors 32 and 34. If a middle fence portion is employed, it then also is similarly installed in its respective middle connector(s) 36.

[0081] As to further details of the manner of usage and operation of the instant invention, the same is apparent from the above disclosure, and accordingly, no further discussion relative to the manner of usage and operation need be provided.

[0082] It is apparent from the above that the present invention accomplishes all of the objects set forth by providing a new and improved safety platform scaffold apparatus that is low in cost, relatively simple in design and operation, and which may advantageously be used to provide a safety platform scaffold apparatus that keeps those persons installing roof trusses safe in a number of ways that are not known in the prior art. With the invention, a safety platform scaffold apparatus is provided that can be readily assembled and disassembled at a work site. With the invention, a safety platform scaffold apparatus is relatively light and easy to lift and lower, with respect to the top of a wall. With the invention, an alternatively preferred unique prefabricated floor panel member is provided capable of being securely engaged in place on a pair of wall supporting members to provide enhanced strength and stability to the scaffold apparatus assembly.

[0083] Thus, while the present invention has been shown in the drawings and fully described above with particularity and detail in connection with what is presently deemed to be the most practical and preferred embodiment(s) of the invention, it will be apparent to those of ordinary skill in the art that many modifications thereof may be made without departing from the principles and concepts set forth herein, including, but not limited to, variations in size, materials, shape, form, function and manner of operation, assembly and use.

[0084] Hence, the proper scope of the present invention should be determined only by the broadest interpretation of the appended claims so as to encompass all such modifications as well as all relationships equivalent to those illustrated in the drawings and described in the specification.

1. A safety platform scaffold apparatus for support by a wall, comprising, in combination:

first and second wall-supportable units for being supported by said wall, and a one-piece work platform for being supported on and between said first and second wall-supportable units,

wherein each of said first and second wall-supportable units includes first and second riser portions, respectively, and further includes first and second work platform floor support arms extending outwardly from said first and second riser portions, respectively, each of said work platform floor support arms having substantially the same axial extent,

wherein said one-piece work platform is of substantially rectangular shape characterized by first and second opposed longitudinally extending, opposed, side edge portions of predetermined extent, and first and second transversely extending, opposed end edge portions of predetermined extent, and

wherein said one-piece work platform further includes first and second work-platform-to-floor-support-arm connector assemblies, said first and second work-platform-to-floor-support-arm connector assemblies being rigidly affixed respectively to said first and second transversely extending, opposed, end edge portions of said one-piece work platform, respectively, said first and second connector assemblies capable of establishing interlocking removable engagement of said one-piece work platform on said work platform floor support arms on said first and second wall-supportable units, respectively, and

wherein said one-piece work platform has a predetermined length defined by the predetermined longitudinal extent of said opposed first and second side edge portions of said substantially rectangular-shaped work platform, said first work-platform-to-floor-support-arm connector assembly and said second work-platform-to-floor-support-arm connector assembly each has an opening to receivingly engage said first and second work platform support arms extending from said first and second riser portions, respectively, when said one-piece work platform is positioned over and lowered onto said first and second work platform support arms extending outwardly from said first and second riser portions so as to maintain said first and second wall-supportable units in interlocked spaced apart disposition on said wall a distance substantially equal to said predetermined length of said one-piece work platform.

2-13. (canceled)

14. The apparatus of claim 1 wherein each of said first and second work platform floor support arms extending outwardly from said first and second riser portions, respectively, has a top surface and a side surface, and wherein each of said first and second work-platform-to-floor-support-arm connector assemblies, respectively, includes at least one hook member for engaging said top surface and said side surface on each of said first and second work platform floor support arms, respectively.

15. The apparatus of claim 14 wherein said first work-platform-to-floor-support-arm connector assembly at least one hook member comprises a first hook member having a length measured along the transverse extent of said first end edge portion of said one-piece work platform, said length of said first connector assembly at least one hook member

being less than the transverse extent of said work platform first end edge portion, said first connector assembly at least one hook member being rigidly affixed to said first end edge portion of said rectangular-shaped work platform substantially centrally thereon,

wherein said second work-platform-to-floor-support-arm connector assembly at least one hook member comprises second and third hook members, said second and third hook members each having a length measured along the transverse extent of said second end edge portion of said one-piece work platform, said length of said second and third hook members each being less than said length of said first hook member,

and wherein said second and third hook members are rigidly affixed to said second end edge portion of said rectangular-shaped work platform in a spaced-apart manner with respect to each other along the transverse extent of said second end edge portion of said one-piece work platform.

16. The apparatus of claim 15 wherein the length of said first hook member measured along the transverse extent of said first end edge portion of said one-piece work platform is equal to Y,

wherein the spacing between said second and third hook members, respectively, measured along the transverse extent of said second end edge portion of said one-piece work platform is equal to X,

wherein Y is less than X,

wherein the transverse extent of said one-piece work platform is equal to W,

wherein the sum of the length of said second and third hook members, respectively, measured along the transverse extent of said second end edge portion of said one-piece work platform is equal to W-X, and

wherein W is greater than W-X plus Y.

17. The apparatus of claim 14 wherein said one-piece work platform has a top planar surface, and each of said first, second and third hook members is in the form of a channel member having a top portion level with said top planar surface, each said channel member further having a downwardly projecting side portion extending from said channel member top portion and being spaced beyond its corresponding work platform end edge to which it is affixed a distance equal to C,

wherein the width of said top portion of each said first and second work platform floor support arms is equal to D, and

wherein C is greater than D.

18. The apparatus of claim 14 further including a third wall-supportable unit substantially identical to said first and second wall-supportable units, and a second one-piece work platform substantially identical to said first-mentioned work platform,

wherein said first and second work-platform-to-floor-support-arm connector assemblies on said substantially identical second work platform are adapted to engage said work platform floor support arms on said first and third wall-supportable units, respectively, so as to maintain said first, second, and third wall-supportable units in spaced apart interlocked disposition on said wall a distance substantially equal to the length of said first and second work platforms.

19. The apparatus of claim 18 wherein said second work-platform-to-floor-support-arm connector assembly

affixed to said opposed second transverse end edge of said substantially identical work platform is adapted to engage said first floor support arm on said first wall-supportable unit in a straddling relation to said first work-platform-to-floor-support-arm connector assembly affixed to said first transverse end edge on said first mentioned one-piece work platform when said first work-platform-to-floor-support-arm connector assembly affixed to said first transverse end edge on said first mentioned one-piece work platform simultaneously engages said first work platform floor support arm on said first wall-supportable unit.

20. A removable work platform sub-assembly for use with a pair of laterally spaced wall-supportable units each having a horizontally extending floor support arm, respectively, said sub-assembly comprising:

a work platform, said work platform comprising a unitary, solid, substantially rectangular-shaped planar member, said planar member having first and second side edges and first and second end edges wherein said first and second end edges intersect said first and second side edges to define the four corners of said substantially rectangular-shaped planar member,

wherein said first and second side edges have a length greater than the length of said first and second end edges, respectively, of said substantially rectangular-shaped planar member,

wherein said planar member further comprises a top surface for supporting workmen thereon and a thickness dimension extending between said top surface and the bottom extent of said first and second side edges and said first and second end edges, and

wherein said planar member further includes first and second floor-support-arm-connectors rigidly attached to said first and second end edges respectively,

whereby said planar member is capable of being removably supported on said horizontally extending floor support arms, respectively, with said first and second end edges substantially in parallel juxtaposition to said pair of horizontally extending floor support arms, respectively, and said first and second side edges extending substantially perpendicular between said pair of horizontally extending support arms, respectively.

21. The sub-assembly of claim **20** wherein said work platform is substantially rectangularly-shaped, said rectangularly-shaped work platform comprises a frame having first and second opposed ends,

a planar floor member affixed to said frame, and

wherein said first

work-platform-to-wall-supportable-unit-connector and said second work-platform-to-wall-supportable-unit-connector are affixed to said opposed first and second ends of said frame, respectively.

22. The sub-assembly of claim **21** wherein said frame comprises a right-angle aluminum member and said planar floor member comprises a plywood board, said aluminum member and said plywood board being affixed together via a multiplicity of spaced fasteners

23. The sub-assembly of claim **21** wherein said first work-platform-to-wall-supportable-unit-connector and said second work-platform-to-wall-supportable-unit-connector comprise U-shaped channel members affixed to said opposed first and second ends of said frame, respectively, said U-shaped members defining openings for removably receiving the top portion of said horizontally extending floor support arms, respectively.

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