US 20030196580A1

(19) **United States**

(12) **Patent Application Publication**

Broderick et al.

(10) **Pub. No.: US 2003/0196580 A1**

(43) **Pub. Date: Oct. 23, 2003**

(54) **FLOATING PLAYGROUND**

(75) Inventors: **Dennis L. Broderick**, Spring City, UT (US); **LaVon F. Broderick**, Spring City, UT (US)

Correspondence Address:
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111 (US)

(73) Assignee: **Nauticblue Corp.**

(21) Appl. No.: **10/452,397**

(22) Filed: **Jun. 2, 2003**

Related U.S. Application Data

(63) Continuation of application No. 10/265,821, filed on Oct. 7, 2002, now abandoned, which is a continuation of application No. 09/879,852, filed on Jun. 11, 2001, now abandoned.

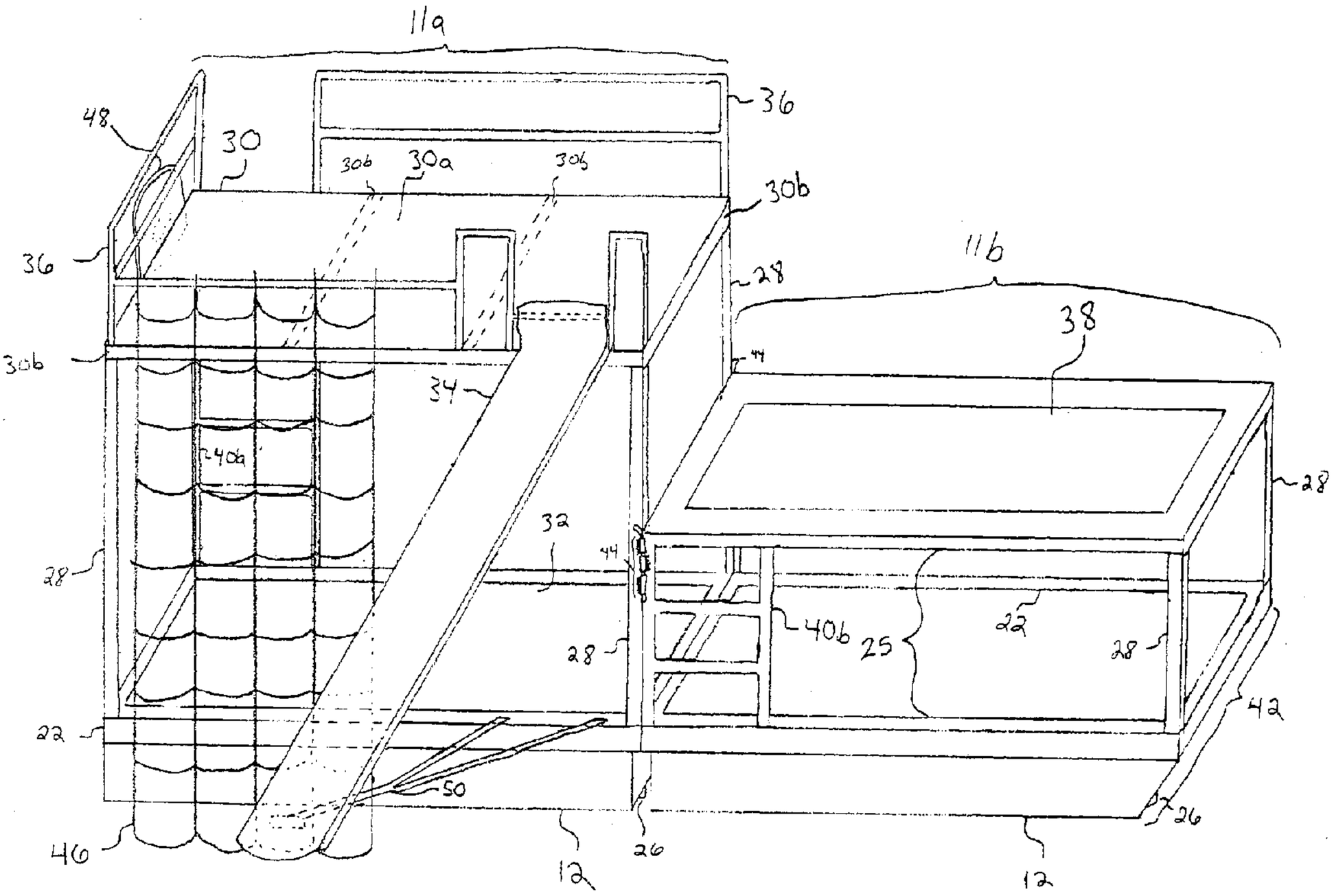
Publication Classification

(51) **Int. Cl.**[7] **A63B 5/11**; A63G 21/18; A63G 21/00; A63G 9/00; A63H 23/10; A63G 31/00; B63B 35/44

(52) **U.S. Cl.** **114/264**; 472/116; 472/117; 472/118; 472/128; 482/27; 482/29

(57) **ABSTRACT**

A floating playground includes floating modules which provide buoyancy to a variety of recreational implements. Rigid flotation vessels filled with foam provide buoyancy to the modules. The modules have a frame and plurality of posts which can support a variety of recreational implements. The modules float individually or can be connected together to from a floating playground with a variety of recreational implements. The modules are also mobile so they can be moved from location to location and interchanged with other modules to form a dynamic playground.



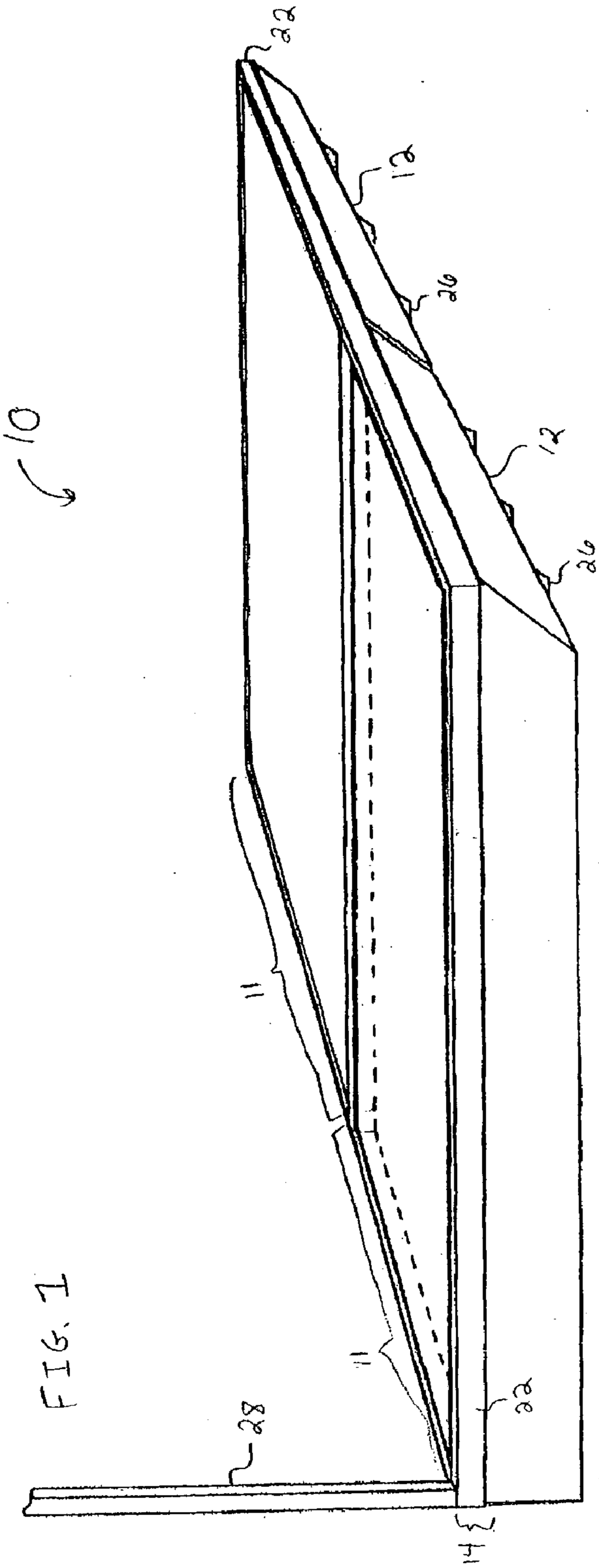


FIG. 1

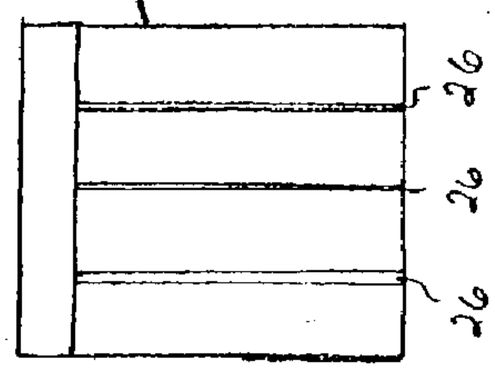


FIG. 1C

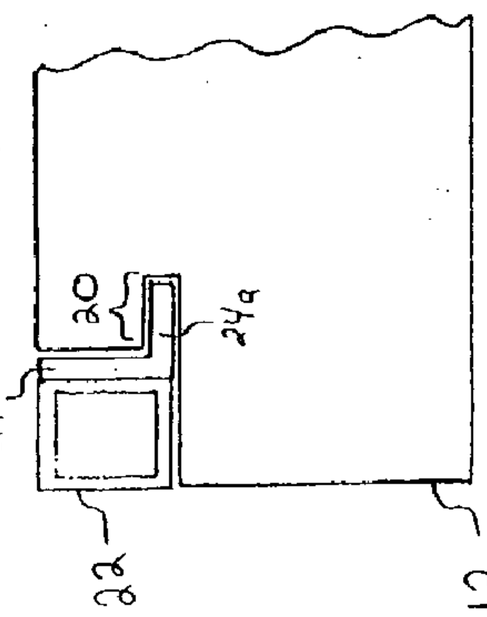


FIG. 1B

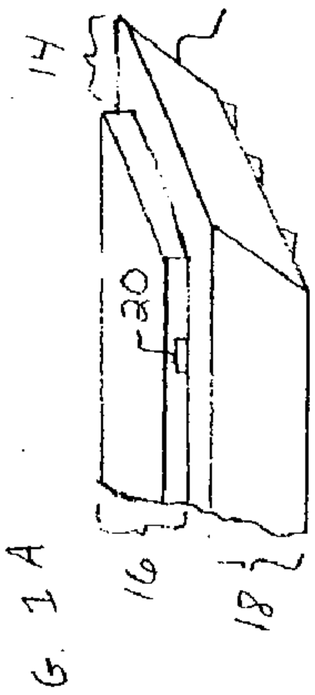


FIG. 1A

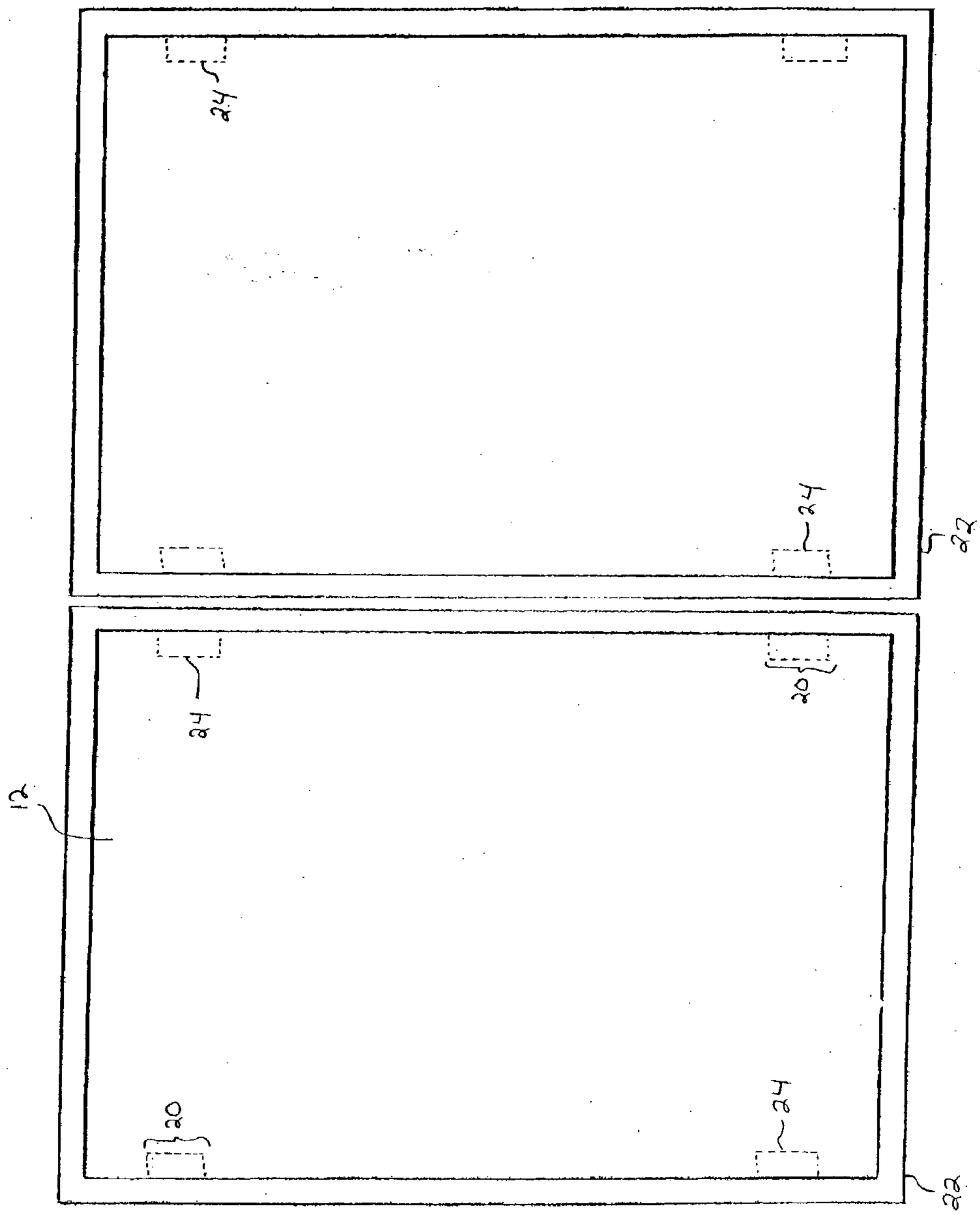


FIG. 2

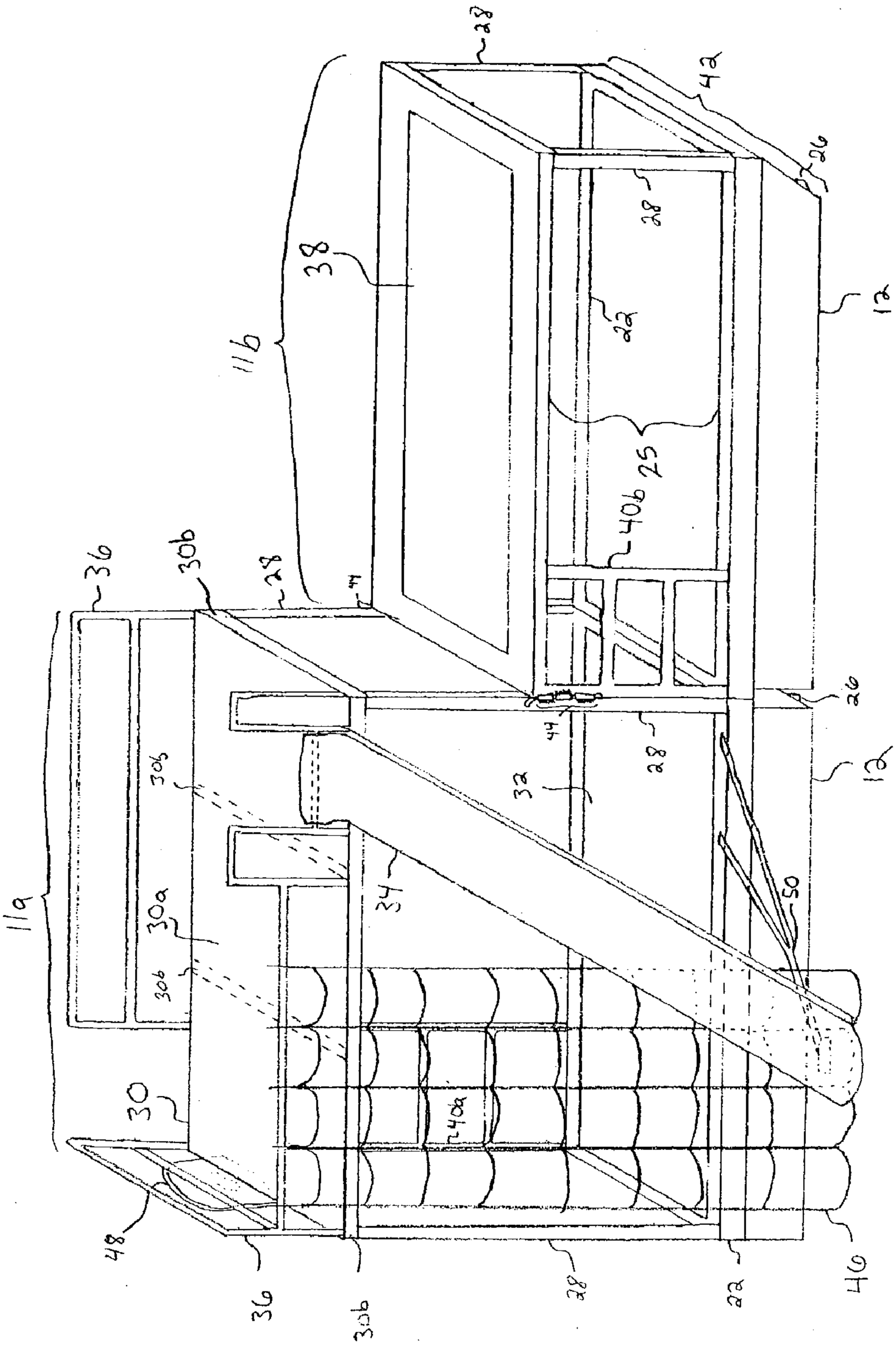

42
26
28
38
116
22
12
25
406
36
306
28
26
44
28
32
12
24
50
306
30a
306
30
406
48
9
36
306
38
22
4

FIG. 3

FIG. 3A

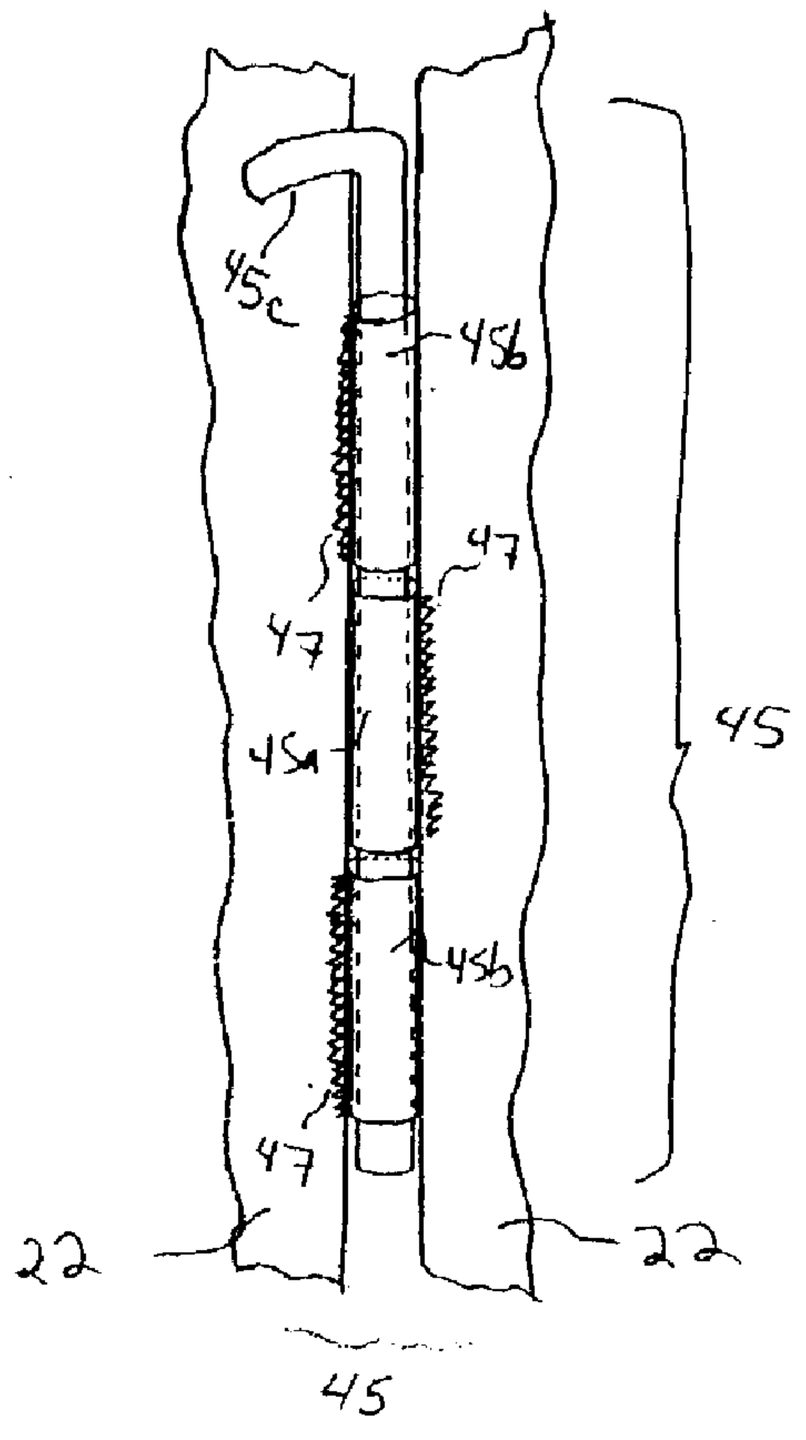

45c
45b
47
47
45a
47
45
45b
47
22
22
45

FIG. 3B

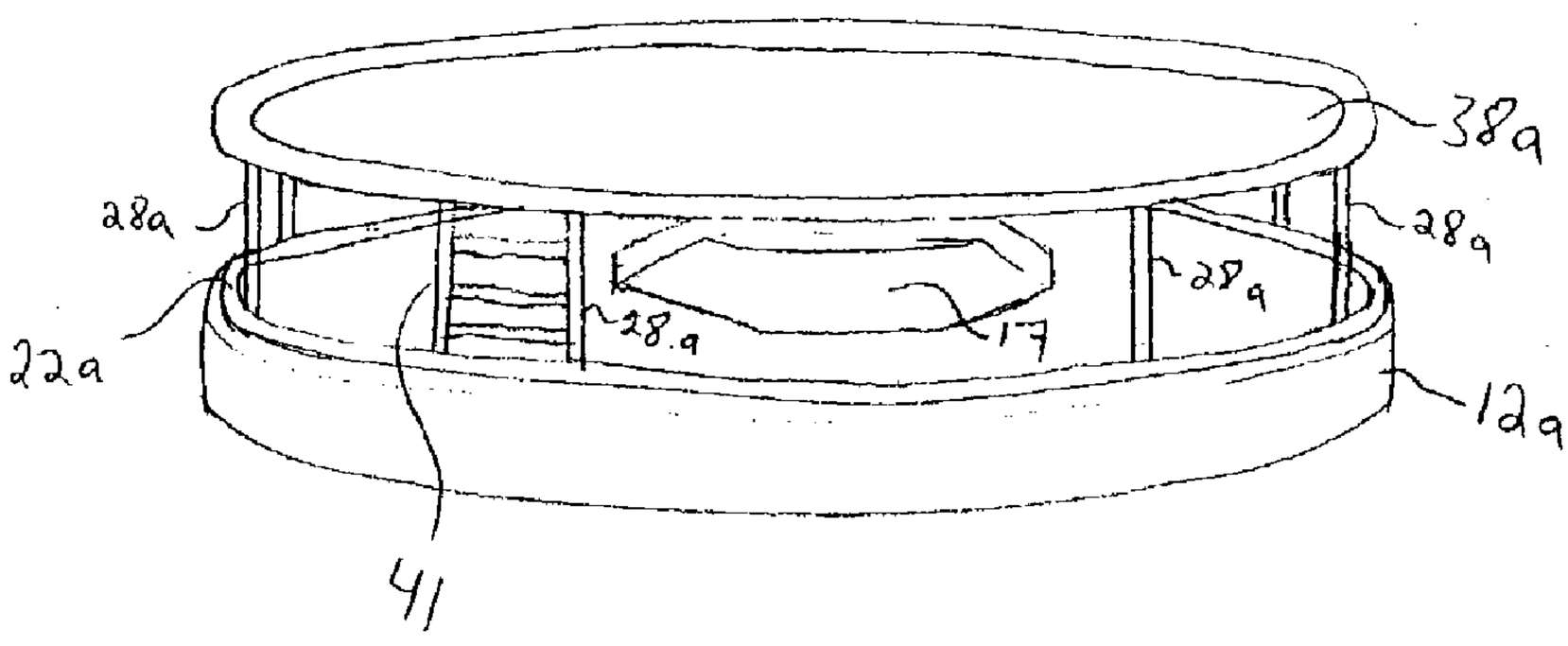

38a
28a
28a
22a
28a
17
29a
12a
41

FIG. 4

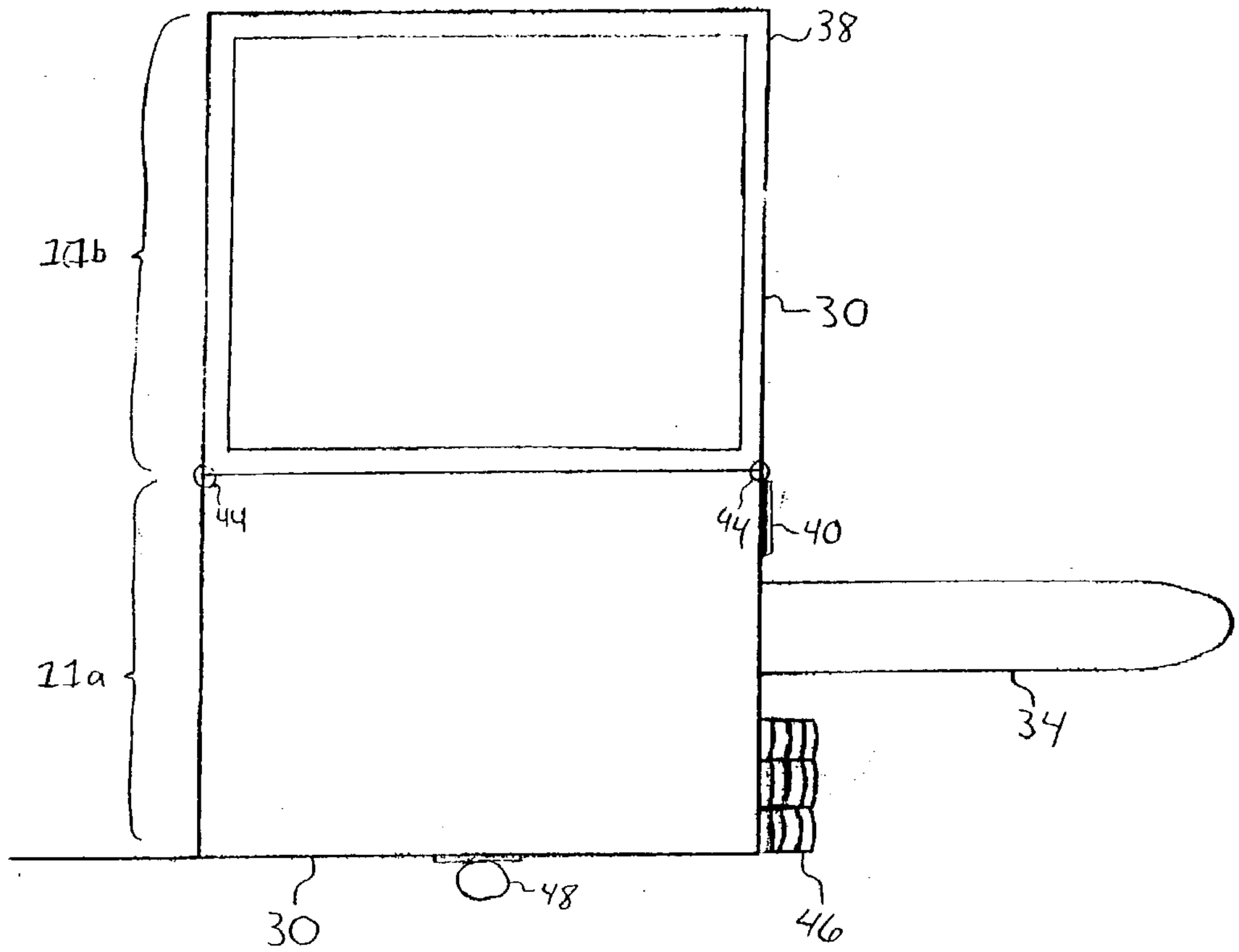


FIG. 4A

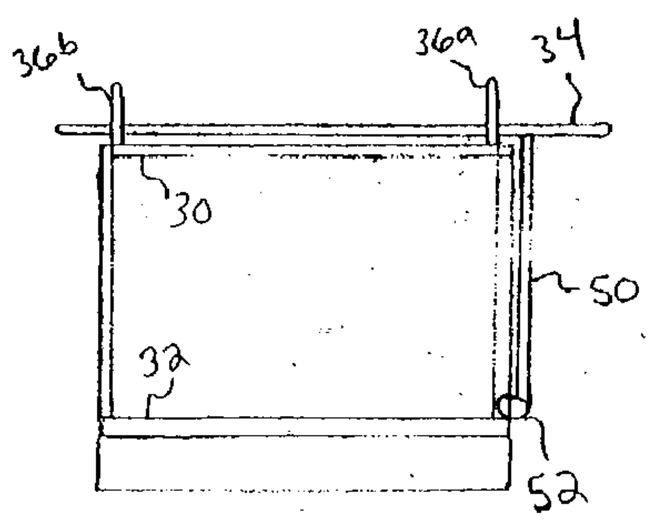
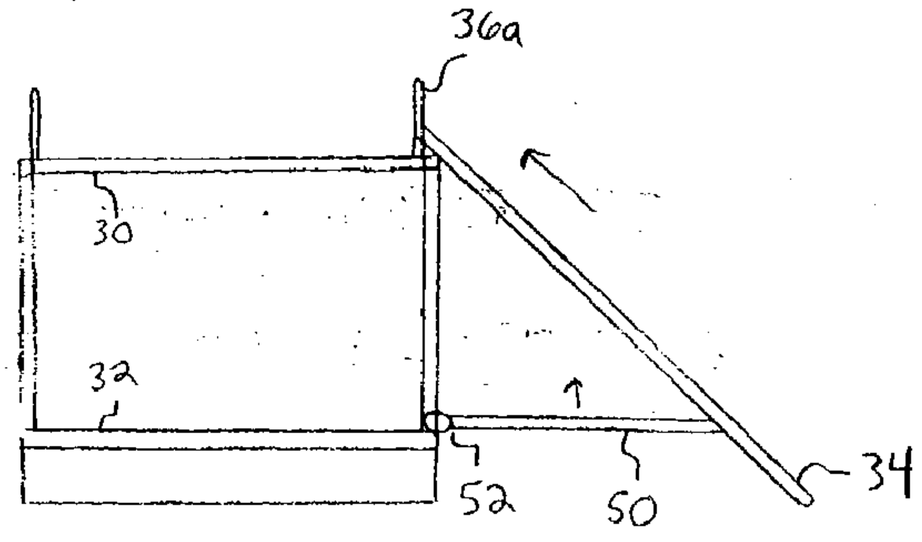


FIG. 4B



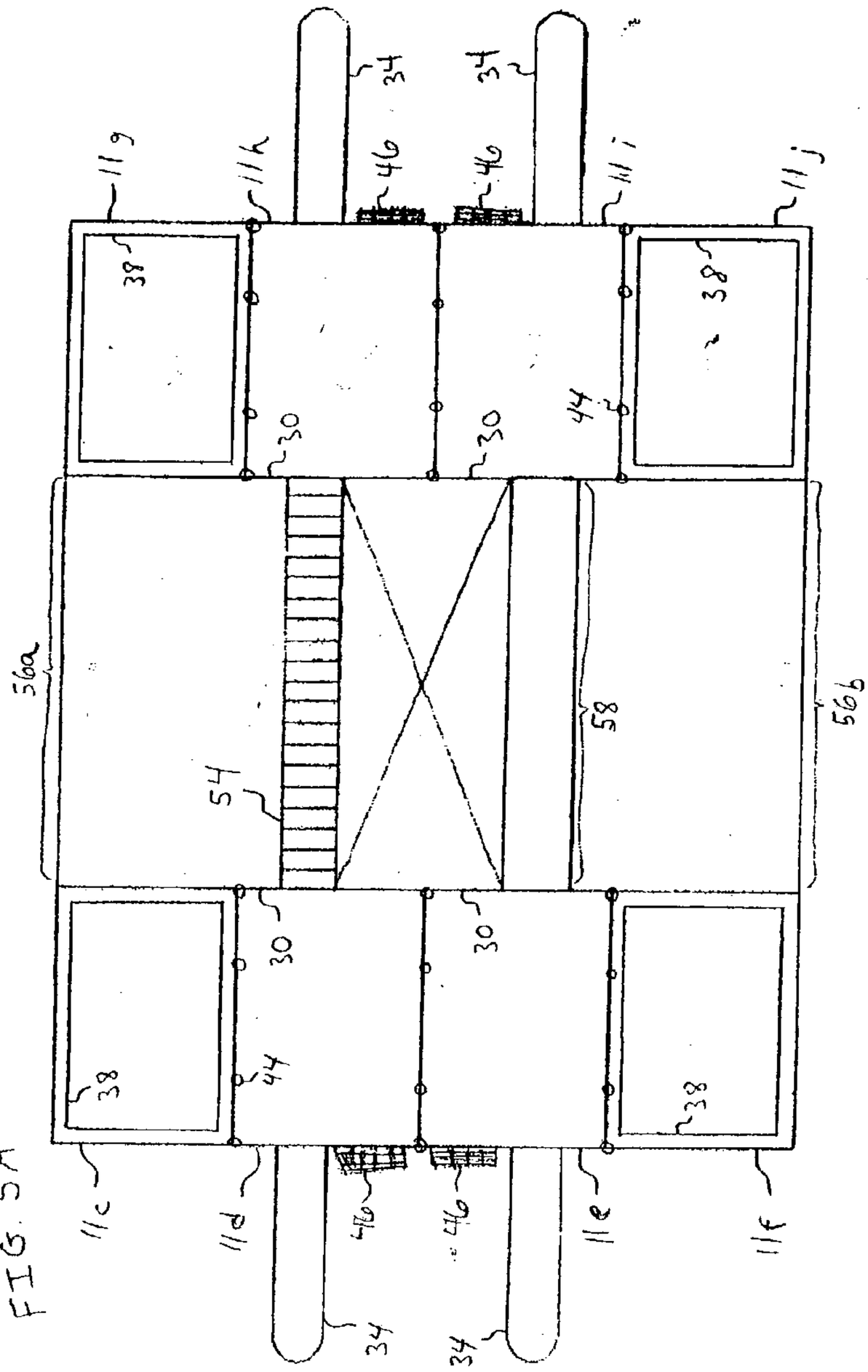

11g
11k
46
46
11i
11j
38
38
30
30
44
56a
54
58
56b
30
30
38
38
44
11c
11d
46
46
11e
11f
34
34

FIG. 5A

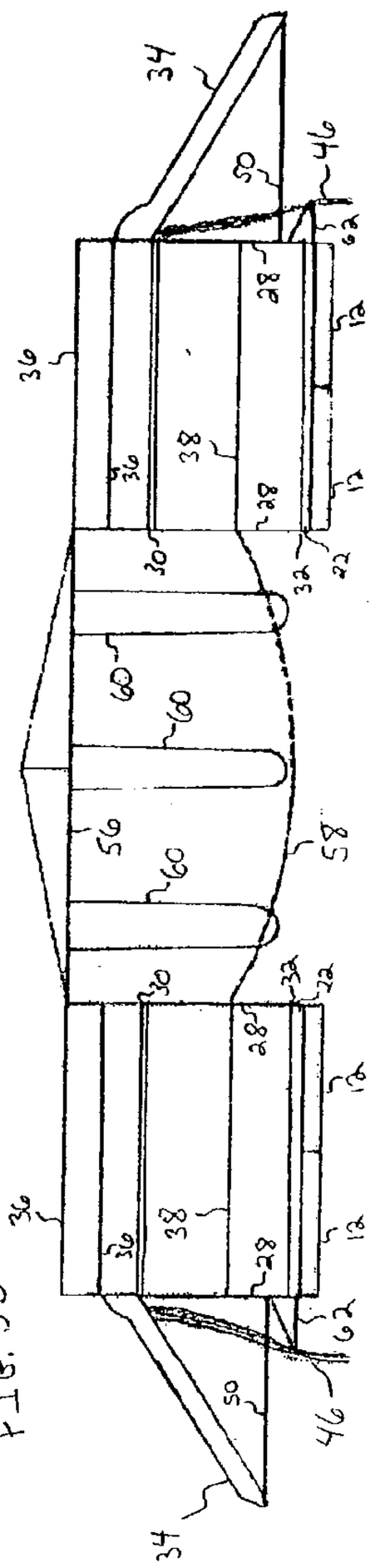

34
46
50
62
28
12
36
38
30
32
22
60
60
56
60
58
30
32
28
12
36
38
28
12
62
50
46
34

FIG. 5B

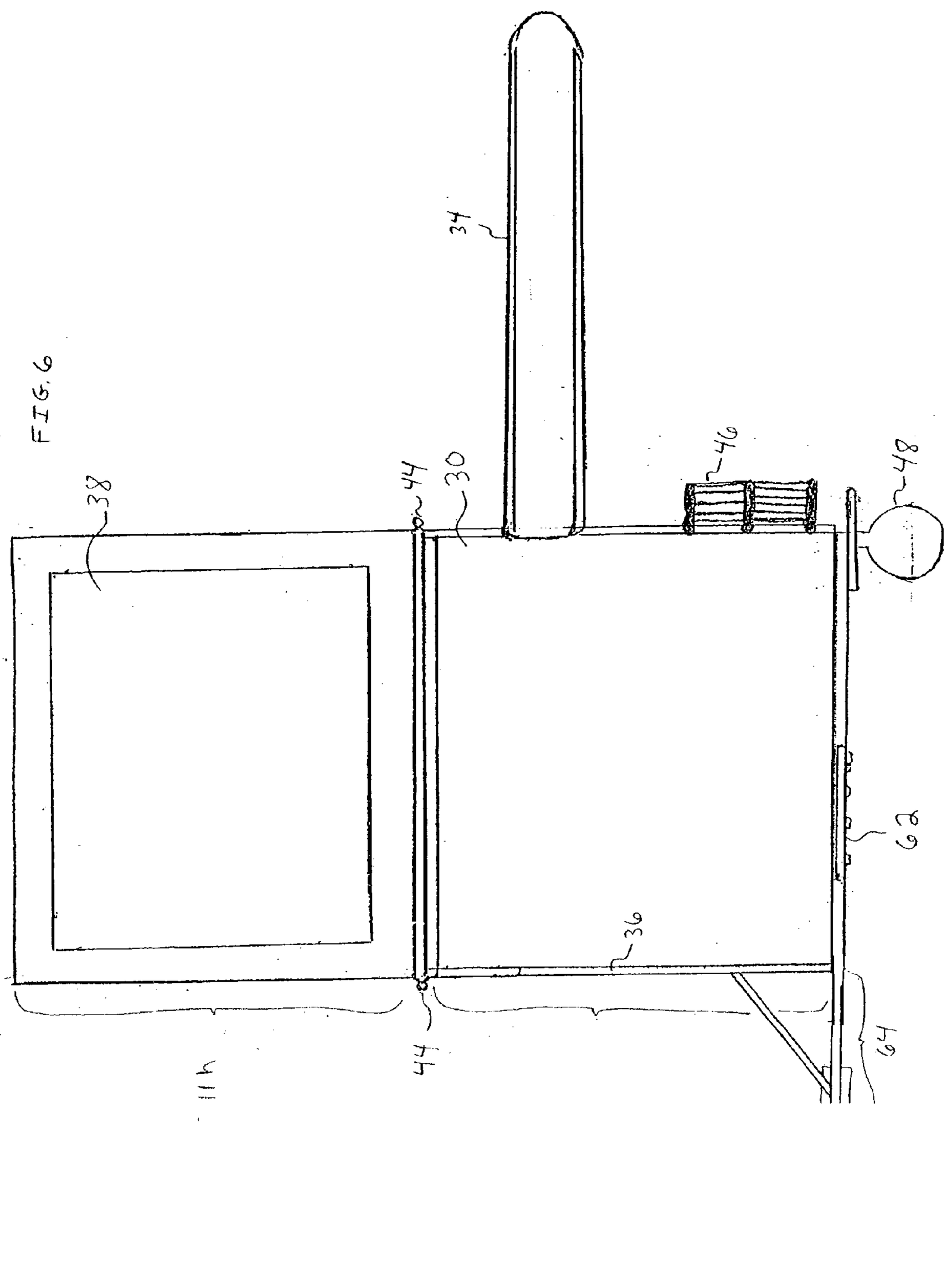


FIG. 6

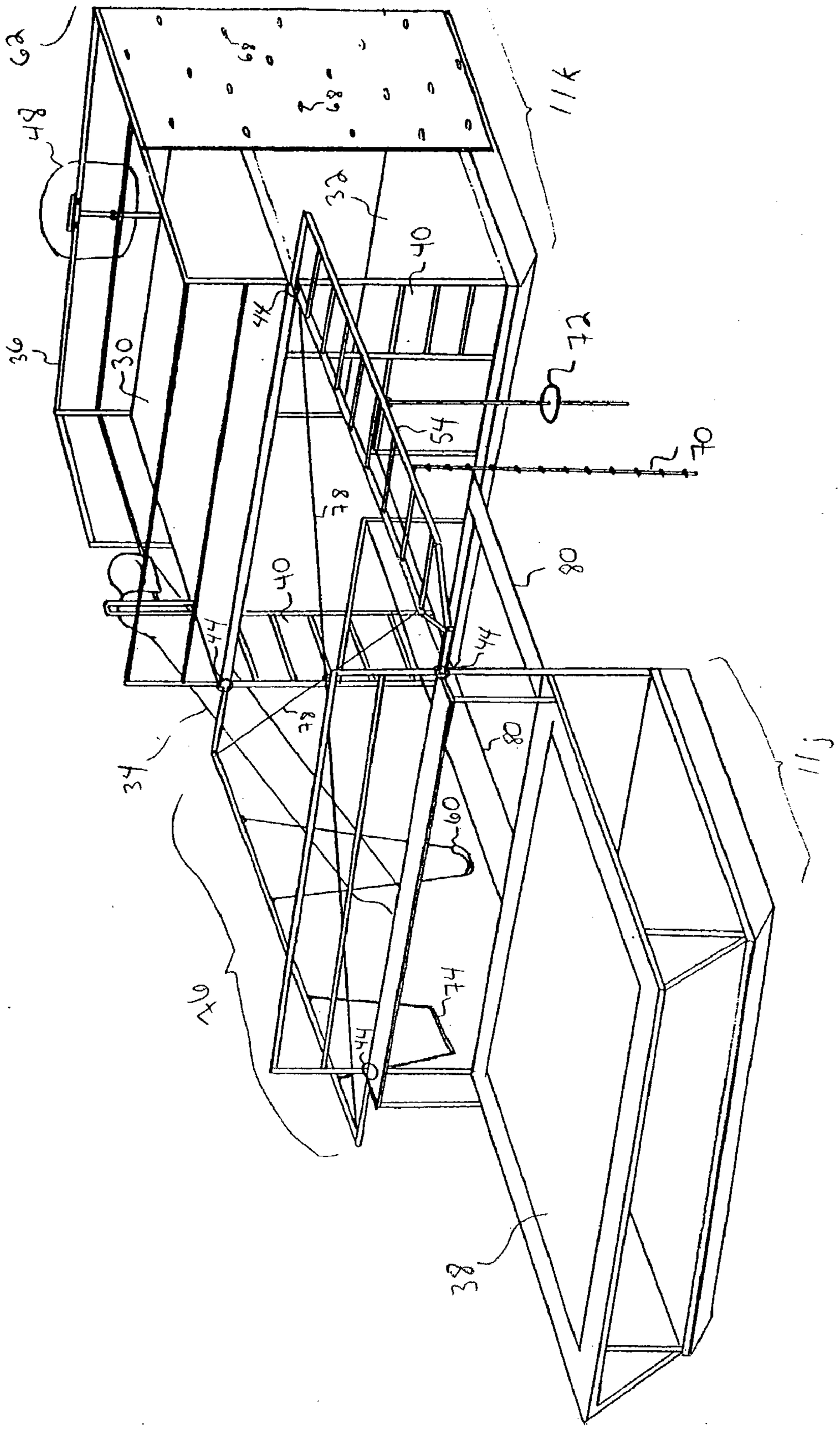
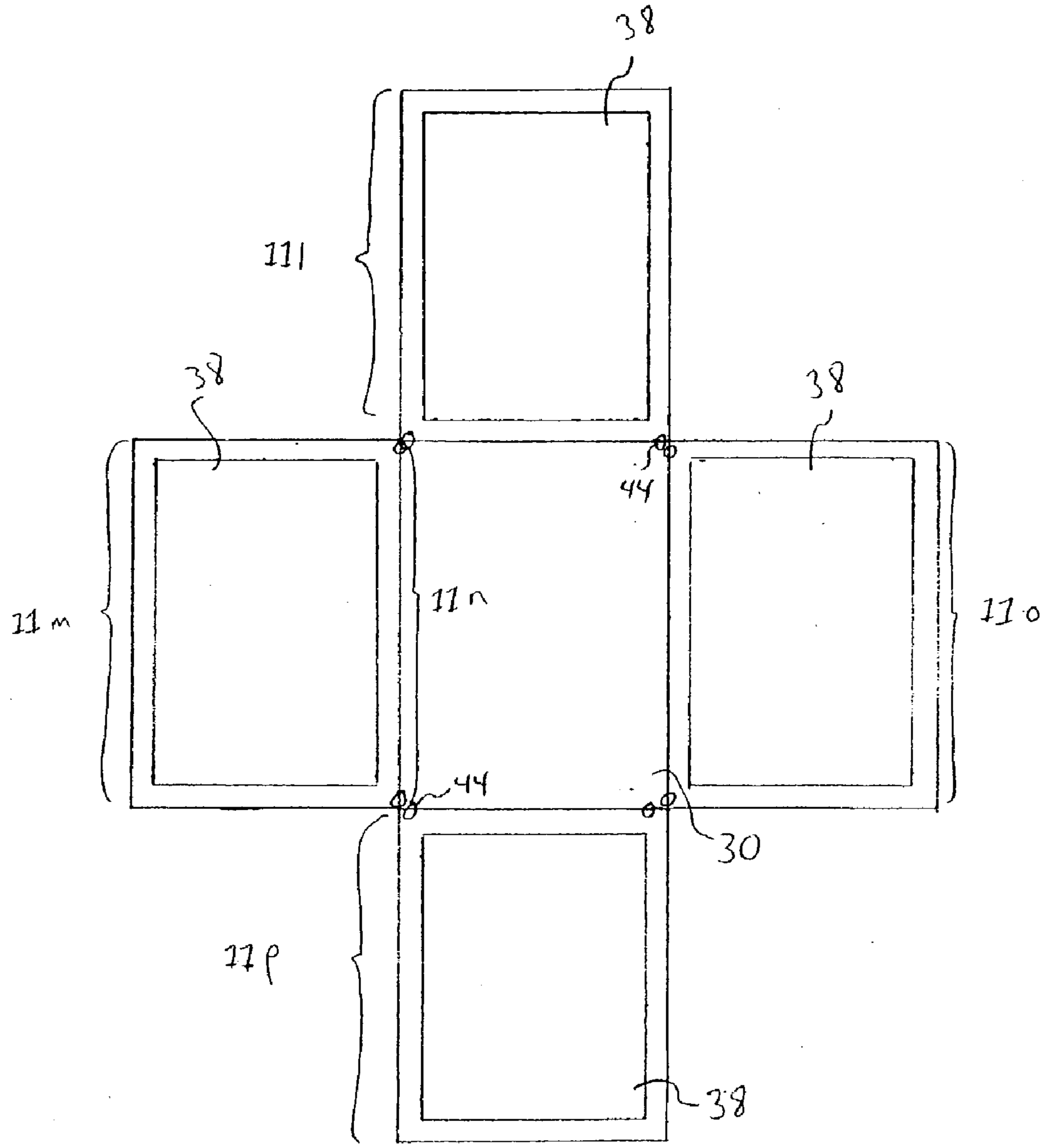

68
68
68
11k
42
32
40
44
36
30
72
54
70
82
40
44
44
80
34
82
80
11j
69
47
49
28

FIG. 7

FIG. 8



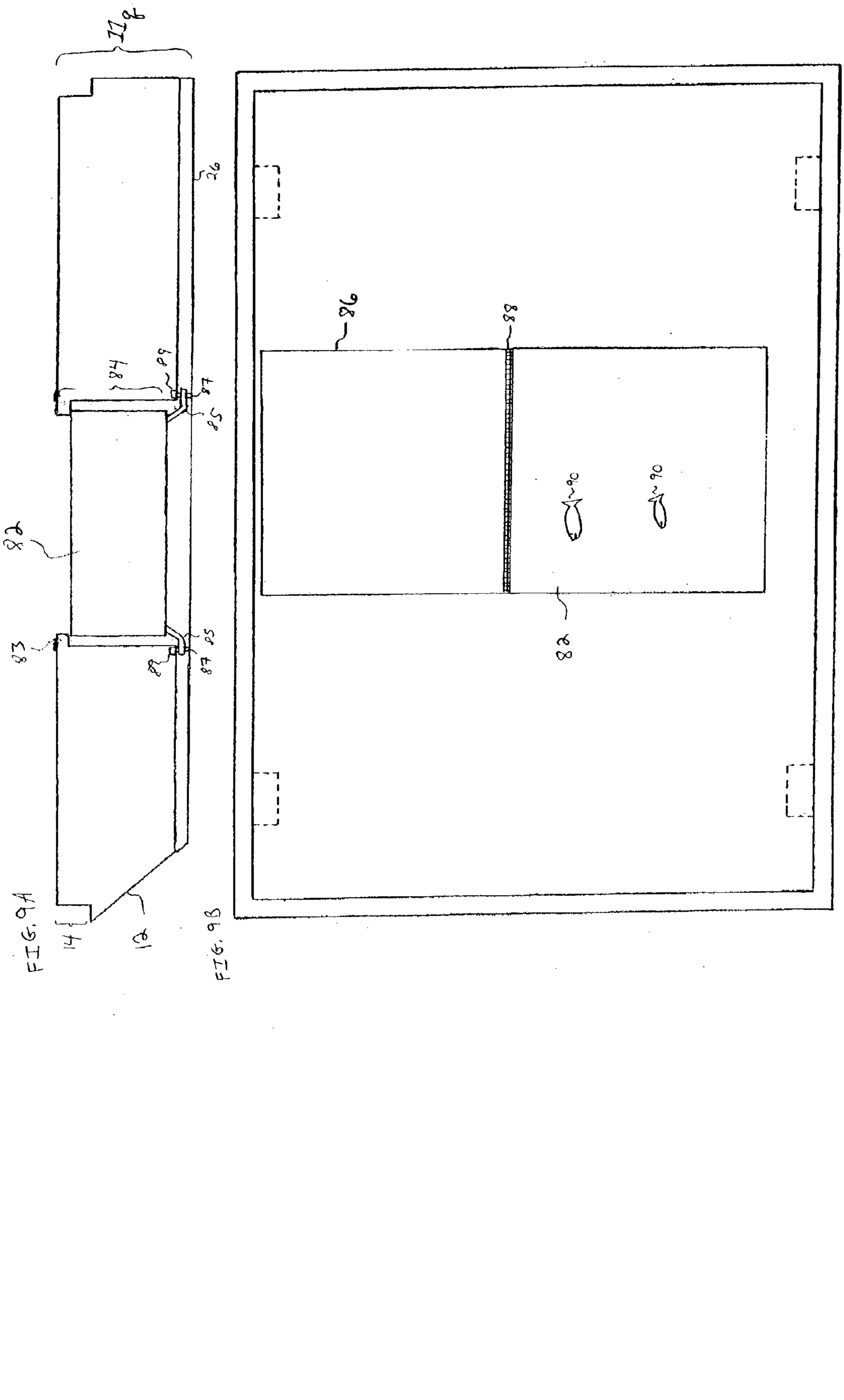


FIG. 9A

FIG. 9B

FLOATING PLAYGROUND

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of patent application Ser. No. 10/265,821, filed Oct. 7, 2002, which is a continuation of patent application Ser. No. 09/879,852, filed Jun. 11, 2001, which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

[0002] 1. The Field of the Invention

[0003] The present invention relates generally to floating recreational devices, and more particularly, but not necessarily entirely, to a movable, floating modular playground configured to accommodate various playground equipment for kids of all ages.

[0004] 2. The Relevant Technology

[0005] The prior art discloses a number of water trampolines. Water trampolines provide a leisure time activity for kids of all ages in a body of water. The combination of a trampoline and an inflatable vessel allows users to enjoy the bouncing and acrobatic activities performed on a trampoline with the benefits of playing in the water. However, the disclosed trampolines are limited to only one recreational device, the trampoline.

[0006] U.S. Pat. No. 6,223,673 granted to Mears et al. discloses a floatable park that includes a trampoline and a first inflatable object attached to the trampoline. Mears discloses attaching another recreational device to the trampoline, such as a giant inflatable pillow, an inflatable log or a slide. However, the park needs to be inflated with air and is only held together with straps.

[0007] The prior art also discloses a number of floating docks and decks. For example, U.S. Pat. No. 6,073,572 granted to Gruhn et al. discloses a floating dock. Gruhn discloses individual modular floating sections that can be connected together to form a floating structure. However, the prior art docks and decks are limited to a floating deck structure without additional attachments.

[0008] U.S. Pat. No. 5,823,132 granted to Donovan discloses a floating deck structure. Donovan discloses a structural deck that floats on a rigid, buoyant material filled watertight float. The deck can be configured to accommodate a variety of accessories and furnishings for various recreational activities. However, the invention is not modular in design and limited to a deck structure.

[0009] The prior art fails to disclose a rigid floating playground module which can be interconnected to other playgrounds. The disclosed playgrounds achieve their buoyancy with an inflatable member, which can be punctured and require patching or replacement.

[0010] The prior art is thus characterized by several disadvantages that are addressed by the present invention. The present invention minimizes, and in some aspects eliminates, the above-mentioned failures, and other problems, by utilizing the methods and structural features described herein.

BRIEF SUMMARY OF THE INVENTION

[0011] It is therefore an object of the present invention to provide a floating playground which can accommodate an almost endless variety of recreational implements or toys.

[0012] It is another object of the present invention to provide such a floating playground capable of being moved from one location to another on the water.

[0013] It is a further object of the present invention, in accordance with one aspect thereof, to provide a floating playground which is sturdy and does not need to be inflated.

[0014] It is an additional object of the invention, in accordance with one aspect thereof, to provide a floating playground with a modular design, wherein the modular units can be securely connected with other units.

[0015] The above objects and others not specifically recited are realized in a specific illustrative embodiment of a floating playground. The floating playground includes two modules attached together. The modules are each supported by a floating vessel. The floating vessels are rectangular shaped, rotationally molded pontoons filled with foam. Preferably vertical posts attach to the frame that encircles the pontoons and are able to support the recreational implement. One of the modules comprises a lower deck beneath an upper deck. The upper deck has a railing which supports a slide, climbing net, a basket ball hoop and a ladder. The other module is a trampoline. The modules can also support a wide variety of other recreational implements including, but not limited to: a trampoline, a climbing net, a slide, a ladder, a basketball hoop, a deck, a swing, a bathroom, a kitchen, a canopy covering the top or sides of the deck, a tent, an infant swing, an inflatable plastic log, a toy captains wheel, a toy periscope, a glass bottom section, a set of monkey bars, a jungle gym, a climbing tube or any other recreational implement.

[0016] Additional objects and advantages of the invention will be set forth in the description which follows, and in part will be apparent from the description, or may be learned by the practice of the invention without undue experimentation. The objects and advantages of the invention may be realized and obtained by means of the instruments and combinations particularly pointed out in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] The above and other objects, features and advantages of the invention will become apparent from a consideration of the subsequent detailed description presented in connection with the accompanying drawings in which:

[0018] **FIG. 1** is a perspective view of the base of two modules, or flotation vessels, of the floating playground;

[0019] **FIG. 1A** is a breakaway, perspective view of one of the vessels as shown in **FIG. 1**;

[0020] **FIG. 1B** is a partial, cross-sectional view of one of the vessels shown in **FIG. 1**;

[0021] **FIG. 1C** is a bottom view of one of the vessels shown in **FIG. 1**;

[0022] **FIG. 2** is a top view of the two flotation vessels shown in **FIG. 1**;

[0023] **FIG. 3** is a perspective view of the preferred embodiment of the floating playground showing two modules with various recreational implements;

[0024] **FIG. 3A** is a break away side view of the attachment means that connects the two modules shown in **FIG. 3**;

[0025] **FIG. 3B** is a perspective view of an alternative embodiment of the floating playground shown as a circular trampoline;

[0026] **FIG. 4** is a top view of the preferred embodiment of the floating playground shown in **FIG. 3**;

[0027] **FIG. 4A** is a side view of an alternative embodiment of the floating playground showing a slide in a storage or moving position;

[0028] **FIG. 4B** is a side view of the alternative embodiment shown in **FIG. 4A**, showing the slide in a playing position;

[0029] **FIG. 5A** is a top view of an alternative embodiment of the floating playground;

[0030] **FIG. 5B** is a side view of the alternative embodiment shown in **FIG. 5A**;

[0031] **FIG. 6** is a top view of an alternative embodiment of the floating playground;

[0032] **FIG. 7** is a perspective view of an alternative embodiment of the floating playground;

[0033] **FIG. 8** is a top view of an alternative embodiment of the floating playground;

[0034] **FIG. 9A** is a side view of an alternative embodiment of the floating playground with a glass bottom section; and

[0035] **FIG. 9B** is a top view of the alternative embodiment shown in **FIG. 9A**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0036] For the purposes of promoting an understanding of the principles in accordance with the invention, reference will now be made to the embodiments illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended. Any alterations and further modifications of the inventive features illustrated herein, and any additional applications of the principles of the invention as illustrated herein, which would normally occur to one skilled in the relevant art and having possession of this disclosure, are to be considered within the scope of the invention claimed.

[0037] Before the present device of a floating playground is disclosed and described, it is to be understood that this invention is not limited to the particular configurations, process steps, and materials disclosed herein as such configurations, process steps, and materials may vary somewhat. It is also to be understood that the terminology employed herein is used for the purpose of describing particular embodiments only and is not intended to be limiting since the scope of the present invention will be limited only by the appended claims and equivalents thereof.

[0038] The publications and other reference materials referred to herein to describe the background of the invention and to provide additional detail regarding its practice are hereby incorporated by reference herein. The references discussed herein are provided solely for their disclosure prior to the filing date of the present application. Nothing herein is to be construed as a suggestion or admission that the inventors are not entitled to antedate such disclosure by virtue of prior invention.

[0039] It must be noted that, as used in this specification and the appended claims, the singular forms "a,""an," and "the" include plural referents unless the context clearly dictates otherwise.

[0040] In describing and claiming the present invention, the following terminology will be used in accordance with the definitions set out below.

[0041] As used herein, the terms "comprising,""including, ""containing,""characterized by," and grammatical equivalents thereof are inclusive or open-ended terms that do not exclude additional, unrecited elements or method steps.

[0042] As used herein, the phrase "consisting of" and grammatical equivalents thereof exclude any element, step, or ingredient not specified in the claim.

[0043] As used herein, the phrase "consisting essentially of" and grammatical equivalents thereof limit the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristic or characteristics of the claimed invention.

[0044] As used herein, the phrase "recreational implement" and grammatical equivalents thereof shall refer to an implement that is used primarily for a recreational activity requiring bodily movement by the user, including but not limited to bouncing, jumping, climbing and hanging, turning a toy steering wheel, sliding, swinging, and shooting baskets.

[0045] As used herein, the phrase "trampoline" and grammatical equivalents thereof shall refer to any type of surface with elastic memory that allows a user to be propelled in an upward direction thereupon.

[0046] Applicant has discovered that floating playgrounds are more versatile and provide more recreation if the playground is movable and modular. The modular design allows different modules with different recreational implements to be connected together, and later disconnected and interchanged for other modules. Applicant has thus conceived of a floating playground that supports a variety of recreational implements, is movable and floats. A preferred design concept of the floating playground comprises two modules attached together. Each module rests on a floating vessel and has a frame encircling the perimeter of the vessel. Preferably vertical posts are attached to the frame and support various recreational implements.

[0047] Referring now to **FIG. 1**, there is shown a perspective view of two modules **11** attached together to form the floating playground generally at **10**. A module **11** can be any size, but preferably is no more than eight and one half feet wide, such that the module **11** can fit on a trailer and be transported without a permit. Preferably, the module **11** is supported by a floating vessel **12** that provides buoyancy to the module **11**. The vessels **12** are preferably rectangular in shape, made from rotationally molded plastic and filled with foam, or expanded polystyrene, for buoyancy. The expanded polystyrene preferably has a density of 1 lb/ft^3. The foam prevents the vessels **12** from filling with water in the event that the plastic shell of the vessel **12** is breached. Referring now to **FIG. 1A**, there is shown a breakaway, perspective

view of one of the vessels **12** shown in **FIG. 1**. A ledge **14** is molded into the vessel **12** and preferably circumscribes the entire upper perimeter of the vessel **12**. The ledge **14** defines an upper portion **16** and a lower portion **18** of the vessel **12**. Four pockets **20**, or slots, are molded in the upper portion **16** of the vessel **12**. The pockets **20** are preferably located just above the ledge **14** with two pockets **20** residing on each longitudinal edge of the vessel **12** near the ends.

[**0048**] Referring again to **FIG. 1**, the ledge **14** receives a frame **22** that is preferably made of metal. The frame could also be made of any suitable material to those skilled in the art. The frame **22** is preferably a hollow member, with a rectangular cross-section. The frame **22** circumscribes one vessel **12**. Referring now to **FIG. 1**B, there is shown a partial, cross-sectional view of one of the modules **11** shown in **FIG. 1**. After the frame **22** is placed on the ledge **14**, an attachment means **24**, preferably an angle iron made of metal, with a first portion **24***a* and a second portion **24***b* is slid into each of the four pockets **20**. The attachment means **24** could be any other suitable device, made of a suitable material to those skilled in the art, depending on the type of material used to make the frame **22**. The attachment means **24** is positioned such that the first portion **24***a* slides into the pocket **20** and the second portion **24***b* rests flush against the frame **22**. The second portion **24***b* of the attachment means **24** is then attached to the frame **22**, preferably by welding. The attachment of the frame **22** to the four attachment means **24** securely attaches the frame **22** to the vessel **12**. Referring again to **FIG. 1, a** preferably vertical post **28** attaches to the frame **22**, preferably by welding. The posts **28** are preferably made of metal, but can be made of any other suitable material used to make the frame **22**. The posts **28** can be placed anywhere on the frame **22** in a manner to support any type of recreational implement (not shown).

[**0049**] Referring now to **FIG. 1**C, there is shown a bottom view of one of the vessels **12** as shown in **FIG. 1**. The vessels **12** preferably have three ridges **26**, or rudder-like projections, that run the majority of the longitudinal length of the bottom of the vessel **12**. The ridges **26** act as rudders when the vessel **12** is moved through the water.

[**0050**] Referring now to **FIG. 2**, there is shown a top view of two frames **22** and two flotation vessels **12** of the two modules **11** shown in **FIG. 1**. A frame **22** circumscribes each vessel **12**. The frame **22** is attached to the vessels **12** with the attachment means **24** (shown with dotted lines), which reside in the pockets **20** (shown generally with brackets).

[**0051**] Referring to **FIG. 3**, there is shown a perspective view of a preferred embodiment of the floating playground **10**. The embodiment shows two modules **11***a* and **11***b* with various recreational implements attached. Module **11***a* is attached to module **11***b* with an attachment means **44**. Referring to **FIG. 3**A, there is shown a partial, break away view of the attachment means **44** shown in **FIG. 3**. The attachment means **44** is preferably a hinge pin assembly **45**. The assembly **45** comprises a pair of barrel hinges **45***a* and **45***b,* and a hinge pin **45***c*. The barrel hinges **45***a* and **45***b* are preferably made of metal, and are attached to the frame **22** of the two modules **11***a* and **11***b,* preferably by a weld **47**. Barrel hinge **45***a* is a center hinge **45***a,* attached to the frame **22** of module **11***a* while hinge **45***b* are top and bottom barrel hinges **45***b* attached to the frame **22** of module **11***b*. The modules **11***a* and **11***b* are together by bringing the two modules **11***a* and **11***b* together, then positioning module **11***a* such that the center barrel hinge **45***a* resides between the top and bottom barrel hinges **45***b*. Once the center barrel hinge **45***a* resides between the top and bottom barrel hinges **45***b,* the hinge pin **45***c* is slidably inserted through the top hinge **45***b,* through the center hinge **45***a* and then through bottom hinge **45***b*. The process is repeated for the other attachment means **44** on the modules **11***a* and **11***b,* and then said modules **11***a* and **11***b* are connected together to form a floating playground **10**. The attachment means **44** is preferably a hinge pin assembly **45**, but can also be a latch, a clamp, a U-joint which allows two degrees of movement, but not torsional movement, a spherical end joint which allows three degrees of movement, or any other suitable means to those skilled in the art.

[**0052**] Referring again to **FIG. 3, a** floating vessel **12** is shown supporting each module **11** as a buoyancy base. The frames **22** are shown circumscribing the vessels **12**. Preferably vertical posts **28** are shown supporting an upper deck **30** on one module **11***a* while preferably vertical posts **28** support a trampoline **38** on the second module **11***b*. In an alternative embodiment, the space **25** residing between the trampoline **38** and the frames **22** can be surrounded with a safety net (not shown), preferably around all sides of the trampoline **38**, to prevent any injury to a user of the trampoline **38**. The upper deck **30** comprises a platform **30***a,* which rests on a plurality of cross-members **30***b*. The cross-members **30***b* are preferably made of the same material as the frame **22** and posts **28**, and are attached by welding. The cross-members **30***b* are supported by the preferably vertical posts **28**. A lower decks **32** is shown covering the vessel **12** of module **11***a*. The lower decks **32** is a protective covering, known to those skilled in the art, that functions to cover and protect the top of the vessel **12**. The upper deck **30** of module **11***a* also has a railing **36** attached to the cross members **30***b* of the upper deck **30**. Alternatively, the railing **36** can be attached to the preferably vertical posts **28**. A slide **34** is attached to the railing **36** on the upper deck **30** and runs into the water. The slide **34** is supported by a slide attachment bracket **50** which attaches the slide **34** to the frame **22**. A climbing net **46** is attached to the railing **36** and extends into the water. A basket ball hoop **48** is also attached to the railing **36**. The trampoline **38** is supported by preferably vertical posts **28**. Two ladders **40***a* and **40***b* are shown on the two modules **11***a* and **11***b,* respectively. Ladder **40***b* extends from the trampoline **38** to the frame **22** and the other ladder **40***a* extends from the back side of the upper deck **30** to the lower deck **32** beneath the upper deck **30**. The end **42** of the flotation vessel **12** of module **11***b* beveled. The beveled end **42** allows the floating playground **10** to glide across the water when the modules **11***a* and **11***b* are moved across the water. Ridges **26** act as rudders and help to prevent side to side movement of the modules **11** when the modules **11** are being moved. Movement is accomplished by attaching a rope (not shown) to the modules **11** and towing the modules **11** with a boat (not shown), or other suitable water craft. Alternatively, an outboard motor (not shown) can be attached to the module **11***a* on the end opposite the beveled end **42** to make the modules **11** self-propelling.

[**0053**] It will be appreciated that the recreational implements shown in **FIG. 3** are illustrative of a few of the recreational implements that can be attached to the modules **11**. In addition to the implements shown in **FIG. 3**, other

implements that cab be attached to the playground include, but are not limited to: a swing, a bathroom, a kitchen, curtains enclosing the deck, a canopy covering the deck, a tent covering the trampoline, an infant swing, an inflatable plastic log, a toy captains wheel, a toy periscope, a glass bottom section, a variety of floating toys for children, a set of monkey bars, a jungle gym, a climbing tube, a walk way or any other recreational implement.

[**0054**] Referring to **FIG. 3**B, there is shown an alternative embodiment of one module **11** of the floating playground **10**. This embodiment shows a circular flotation vessel **12***a* supporting a circular trampoline **38***a*. The circular flotation vessel **12***a* is preferably rotationally molded plastic filled with foam with an opening **17** in the center to form a doughnut shape. In the circular embodiment, a frame **22***a* is used to attach preferably vertical posts **28***a* to the trampoline **38***a*. A ladder **41** is attached to the frame **22***a* and trampoline **38***a* to provide access to the trampoline **38***a*.

[**0055**] Referring to **FIG. 4**, there is shown a top view of the preferred embodiment of the floating playground shown in **FIG. 3**. The two modules **11***a* and **11***b* are connected together with the attachment means **44**. Module **11***b* is a trampoline **38**. Module **11***a* is an upper deck **30** with a slide **34**, climbing net **46**, ladder **40** and a basketball hoop **48**.

[**0056**] Referring now to **FIG. 4A and 4B**, there is shown a side view of the module **11***a* shown in **FIG. 4**, with the upper deck **30** and the lower deck **32**. The slide **34** is attached as a recreational implement. **FIG. 4A** shows the slide **34** in a storage or moving position while **FIG. 4B** shows the slide **34** in a playing position. The slide **34** attaches to the frame **22** with a slide attachment bracket **50** and a pivot hinge **52**. The slide attachment bracket **50** is attached to the slide **34** in a manner to those skilled in the art that allows the slide attachment bracket **50** to pivot on the slide **34**. The slide **34** can move from a playing position as shown in **FIG. 4B** to a storage position as shown in **FIG. 4A**. The top of the slide **34** is detachably attached to the railing **36***a* on the upper deck **30** as shown in **FIG. 4B**. After the slide **34** is detached from the railing **36***a,* the slide **34** is moved in an upward direction as indicated by the arrows in **FIG. 4**B and the slide attachment bracket **50** pivots on the pivot hinge **52**. The slide **34** is then attached to the upper railing **36***b* in a manner to those skilled in the art to prevent the slide **34** from moving in a downward direction when the module **11***a* is stored or moved.

[**0057**] As indicated above, the floating playground **10** is modular in design. The modular design allows different modules **11** with various recreational implements to be interconnected and form an almost endless array of combinations. Referring now to **FIG. 5**A, there is shown a top view of a floating playground **10**. The floating playground **10**, comprises eight modules **11***c-j* configured in two rows. The first row consists of modules **11***c-f* and the second row consists of modules **11***g-j*. The various modules **11** are held together through the use of the attachment means **44**. A horizontal ladder **54** is connected to floating modules **11***d* and **11***h*. A swing support **56***a* is connected to floating modules **11***c* and **11***g* and another swing support **56***b* is connected to floating modules **11***f* and **11***j*. A swinging bridge **58** connects floating modules **11***e* and **11***i*. Floating modules **11***c,* **11***f,* **11***g* and **11***j* have trampolines **38** while floating modules **11***d,* **11***e,* **11***h* and **11***i* have upper decks **30** and lower decks **32**.

[**0058**] Referring now to **FIG. 5**B, there is shown a side view of the eight floating modules **11***c-j* as shown in **FIG. 5A**. The flotation vessels **12** are shown. The frame **22** attached to the flotation vessels **12** is also shown. Preferably vertical posts **28** are shown supporting the trampolines **38**, the upper decks **30** and the lower decks **32**. Railings **36** are also on the upper decks **30**. The swing supports **56** are supported on either end by the floating modules **11***c* and **11***g,* and **11***f* and **11***j,* respectively. The swing supports **56** support swings **60**. The climbing nets **46** are also shown and supported at the bottom by net supports **62**. The slides **34** are shown in the playing position and supported by the slide attachment brackets **50**. This arrangement of floating modules **11** and the various recreational implements attached is an example of the number of different embodiments that the floating modules **11** can create. It will be appreciated to those skilled in the art that the modules **11** can be connected to other modules **11** in any configuration or arrangement.

[**0059**] Referring to **FIG. 6**, there is shown another alternative embodiment of two floating modules **11***h* and **11***i*. Module **11***h* is shown with a trampoline **38**, while module **11***i* is shown with an upper deck **30** with various attachments. Attached to the upper deck **30** is a railing **36**. A slide **34** is attached to the railing **36**, as well as a climbing net **38**, a basket ball hoop **48**, a climbing wall **62**, an accessory bracket **64** and a swing **60** suspended from the accessory bracket **64**. The two modules **11***h* and **11***i* are attached together by attachment means **44**. The accessory bracket **64** can be used to suspend or attach any suitable recreational implement to those skilled in the art.

[**0060**] Referring to **FIG. 7**, there is shown a perspective view of another alternative embodiment of an arrangement of the modules **11**. Module **11***j* is shown with a trampoline **38** while module **11***k* is shown with an upper deck **30**, a lower deck **32** and various recreational implements. The railing **36** of module **11***k* supports a basket ball hoop **48**, ladders **40**, a slide **34** and a climbing wall **62**. The climbing wall **62** comprises an upwardly-extending and preferably vertical wall **66** with numerous hand holds **68**. The climbing wall **62** can also be tilted away from the module **11***k* in to make climbing more challenging. The hand holds **68** can be either rock-like projections or recesses where a user can grasp on to the climbing wall **66**. The two modules **11***j* and **11***k* are connected together with a jungle gym **76**. The jungle gym **76** attaches to the modules **11***j* and **11***k* using the attachment means **44**. The attachment means **44** can be a hinge pin, a U-joint, or a spherical end joint. A preferred embodiment of the ladder **54** is to attach it such that the attachment means **44** at one of the opposing ends of the ladder **54** is a U-joint, and the attachment means **44** at the other opposing end of said ladder is a spherical end joint, to prevent the end supported by a U-joint from engaging in torsional movement, and thereby prevent the ladder **54** from spinning about its longitudinal axis. Cross tension members **78** are attached diagonally to the corners of the jungle jim **76** to prevent the modules **11***j* and **11***k* from racking in opposite directions in an accordion-like fashion. The jungle gym **76** has a horizontal ladder **54** attached to the front side, from which a climbing rope **70** and a swinging disk **72** are suspended. A swing **60** and a trapeze bar **74** are suspended from the back side of the jungle gym **76**. There are also two walking ramps **80** that connect module **11***j* to module **11***k*.

[0061] Referring now to **FIG. 8**, there is shown a top view of another alternative embodiment of an arrangement of the floating modules **11** to form another floating playground **10**. In this embodiment, modules **11***l*, **11***m*, **11***o* and **11***p* are trampolines **38**. Module **11***n* is an upper deck **30**. The five modules **11***l*-**11***o* are all interconnected with the attachment means **44**.

[0062] Referring now to **FIG. 9**A, there is shown a side, cross sectional view of an alternative embodiment of the floating module **11**. The cross sectional view shows the ledge **14** and one of the ridges **26** attached to the bottom of the vessel **12**. In this embodiment, a glass box **82** filled with argon, to prevent condensation, is attached to the vessel **12**. A protruding ledge **83** is molded into the top surface of the vessel **12** and surrounds the upper perimeter of a void **84** where the glass box **82** resides. The glass box **82** rests against the lower surface of the protruding ledge **83**. The glass box **82** is supported on the lower surface by brackets **85**, which are attached to the bottom of the vessel **12** with bolts **87**. The bolts **87** threadably engage with bolt mounts **89**, wherein said bolt mounts **89** are embedded in the lower surface of the vessel **12**. The glass box **82** allows users of the module **10** to view the underwater world. The glass box **82** could also be any other transparent element known to those skilled in the art. Referring now to **FIG. 9**B, there is shown a top view of the alternative embodiment of the module **11***q* as shown in **FIG. 9A**. In an alternative embodiment, a trap door **86** could attached to the vessel **12** directly above the transparent element **82** and can be opened or closed to either allow or deny access to the transparent element **82**. The trap door **86** can also be transparent so users can peer through both the trap door **86** and transparent element **82** if desired. The trap door **86** is shown in an open position and can swing back to a closed position with the use of a trap door hinge **88**. The open trap door **86** provides access to the transparent element **82**, so that users can see through the element **82** and into the water where the fish **90** are located.

[0063] It will be appreciated that the structure and apparatus disclosed herein is merely one example of a means for floating playground, and it should be appreciated that any structure, apparatus or system for a floating playground which performs functions the same as, or equivalent to, those disclosed herein are intended to fall within the scope of a means for a floating playground, including those structures, apparatus or systems for a floating playground which are presently known, or which may become available in the future. Anything which functions the same as, or equivalently to, a means for a floating playground falls within the scope of this element.

[0064] In accordance with the features and combinations described above, a preferred design of the floating playground **10** includes:

[0065] (a) two modules **11***a* and **11***b*, each supported by a floating vessel **12**, wherein module **11***a* supports an upper deck **30** and module **11***b* supports a trampoline **38**; and

[0066] (b) wherein a railing **36** is attached to the upper deck **30** of module **11***a*, such that said railing **36** supports a slide **34**, a climbing net **38**, a basketball hoop **48** and a ladder **40***a*.

[0067] Applicant has discovered that many recreational activities can be done in the water. Applicant has thus invented a floating, modular playground **10** that can accommodate a variety of recreational equipment. Applicant's floating playground **10** comprises a floating vessel **12** that is designed to support any one of an endless array of recreational implement. In addition, applicant's floating playground **10** is modular so that many modules **11** can be connected together to form a floating playground **10**.

[0068] Applicant's floating playground **10** can include, but is not limited to, a trampoline **38**, deck **30**, slide **34**, climbing wall **62**, swing **60**, jungle gym **76**, ladders **40**, climbing net **38**, basketball hoop **48**, transparent element **82**, and climbing tube to name a few. Applicant's floating playground is supported by a durable, foam filled, plastic vessels **12** that do not require inflating. The foam also ensures that if the vessel were to be damaged, the vessel **12** will not fill with water and retain its buoyancy.

[0069] Also, because applicant's floating playground **10** is modular, an unlimited number of recreational toys can be attached together to form a floating playground **10**. Applicant's floating playground **10** is also movable. Therefore, a user of the playground **10** can connect and disconnect modules **11** as desired and move the modules **11** to a different location. In essence, the applicant has conceived of a way to build a playground **10** on the water and interchange the toys on the playground in as many combinations as desired.

[0070] The phrase "uppermost portion of the floatation means" as used herein shall refer broadly to the concept of some portion of the vessel that is providing buoyancy, and not to any attachments residing on or connected to said vessel that do not aid in buoyancy or floatation.

[0071] A propelling means for propelling the floating playground **10** from one location to another upon a body of water is within the scope of the present invention. Such a propelling means may include any suitable motor, engine, towing device, or other suitable device now known or later discovered, that is capable of propelling the floating playground **10** from one location to another upon a body of water.

[0072] It is to be understood that the above-described arrangements are only illustrative of the application of the principles of the present invention. Numerous modifications and alternative arrangements may be devised by those skilled in the art without departing from the spirit and scope of the present invention and the appended claims are intended to cover such modifications and arrangements. 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 numerous modifications, including, but not limited to, variations in size, materials, shape, form, function and manner of operation, assembly and use may be made without departing from the principles and concepts set forth herein.

What is claimed is:

1. A floating playground for use on a body of water, comprising:

a float having a top surface extending to a perimeter edge, a ledge being recessed on the top surface along at least a portion of the perimeter edge;

a frame mounted on the ledge of the float; and

a recreational implement mounted on the frame.

2. The floating playground of claim 1, wherein the recreational implement comprises a trampoline.

3. The floating playground of claim 1, wherein the float has a central opening extending therethrough.

4. The floating playground of claim 1, further comprising a safety net mounted on the frame so as to encircles the trampoline.

5. A floating playground for use upon a body of water, comprising:

a first rigid float;

a first means disposed on the first float for supporting a recreational implement;

a second rigid float;

a second means disposed on the second float for supporting an object;

an attachment means for (i) attaching the first float to the second float, or (ii) intercoupling the first float and the second float with a second recreational implement such that the first and second float are spaced apart by the second recreational implement, the second recreational implement spanning a separation space residing between said first and second float.

6. The floating playground of claim 5, wherein the first float has a ledge molded thereon that encircles an outer perimeter of the first float.

7. The floating playground of claim 5, wherein the first means for supporting comprises a frame residing on the ledge

8. The floating playground of claim 7, wherein the frame comprising a hollow tube with a rectangular cross-section.

9. A floating marine structure for use upon a body of water, comprising:

a recreational implement;

a rigid framework for holding the recreational implement; and

means for supporting the rigid framework and the recreational implement above the body of water, wherein said floatation means provides buoyancy when said floatation means is floating upon said body of water, a ledge being molded into the means for supporting that at least partially circumscribes an upper perimeter of the means for supporting.

10. The floating marine structure of claim 9, wherein the ledge defines an upper portion and a lower portion of the means for supporting.

11. The floating marine structure of claim 10, wherein at least one pocket is molded into the upper portion of the means for supporting, such that the pocket forms a slot.

12. The floating marine structure of claim 9, wherein the rigid framework resides in said ledge.

13. A floating climbing wall for use upon a body of water, comprising:

a float;

a surface with at least one means for grasping;

means for attaching the float to the surface; and

means for adjusting the surface such that the surface can be configured at various angles.

14. The floating climbing wall of claim 13, wherein the surface is an upwardly-extending wall.

15. The floating climbing wall of claim 13, wherein the means for grasping comprises elements that protrude from the wall.

16. The floating climbing wall of claim 13, wherein the means for grasping comprises recesses in the wall.

17. The floating climbing wall of claim 16, wherein the means for attaching comprises a frame, wherein the frame resides on the float and supports the surface.

18. A floating, retractable slide for use upon a body of water, comprising:

a slide;

a float;

means for attaching the slide to the float; and

means for retracting the slide, the means retracting comprising an upper attachment bracket and a lower attachment bracket, the upper attachment bracket attaches to an upper portion of the slide and detachably attaches to the means for attaching, and wherein the lower attachment bracket pivotally attaches a lower portion of the slide to the means for attaching.

* * * * *