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(54) **TRAMPOLINE WITH SEATING**

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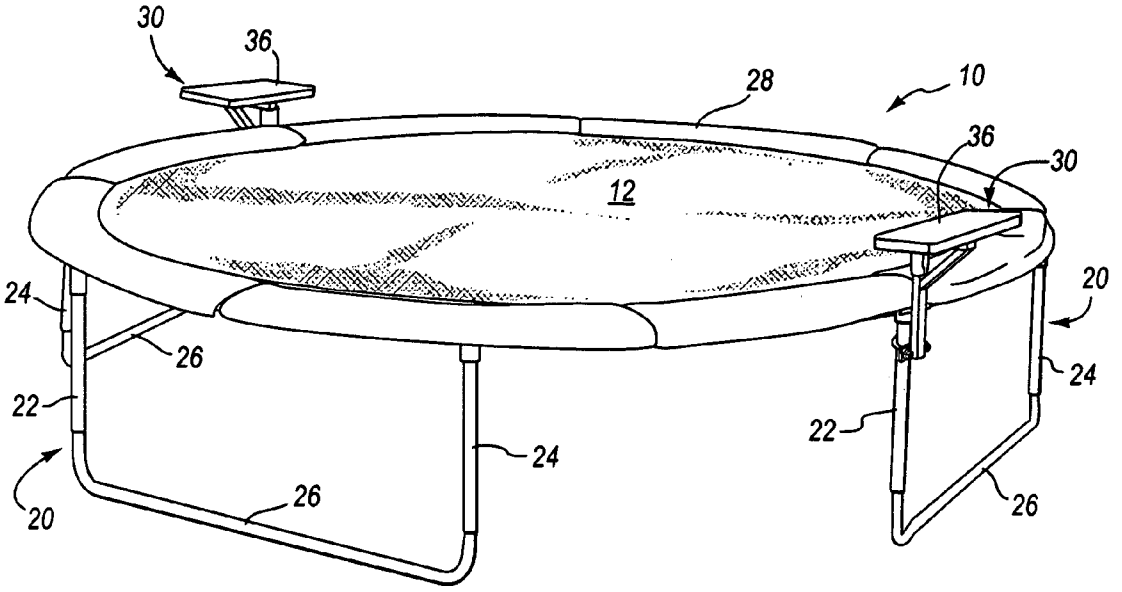
(57) **ABSTRACT**

A trampoline having one or more seat structures supported on a surrounding support frame with which a jumping surface is resiliently stretched. Each seat is carried by the surrounding support structure and is secured in plane by attachment to a trampoline leg that supports the jumping surface and the surrounding support frame. The seat structures are attachable to many known trampolines and provide seating outside of the jumping surface of the trampoline so that people can sit on the seats even while other people are jumping on the jumping surface and without obstructing the jumping surface.



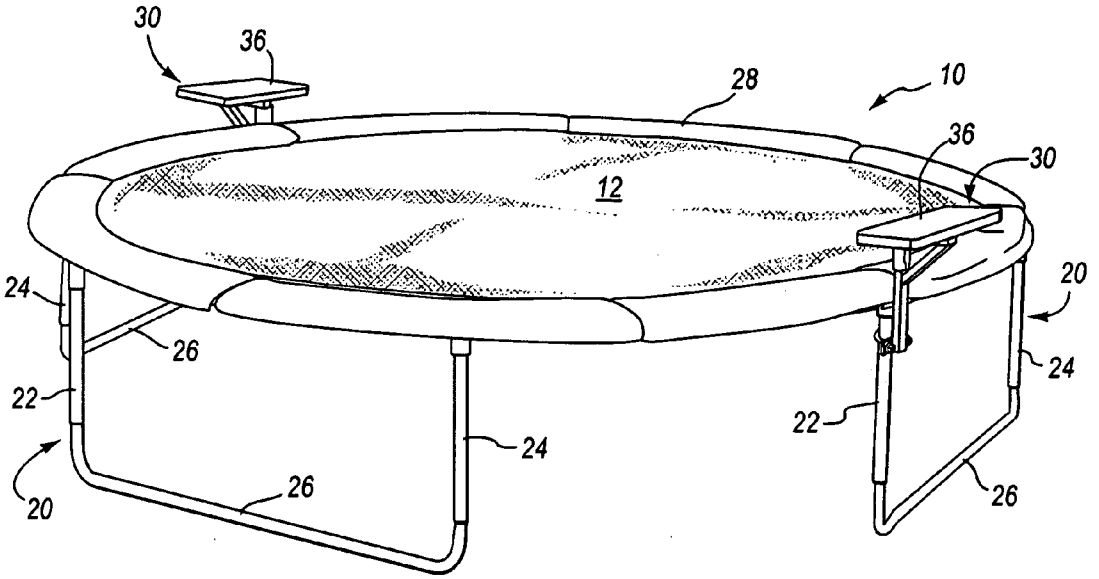

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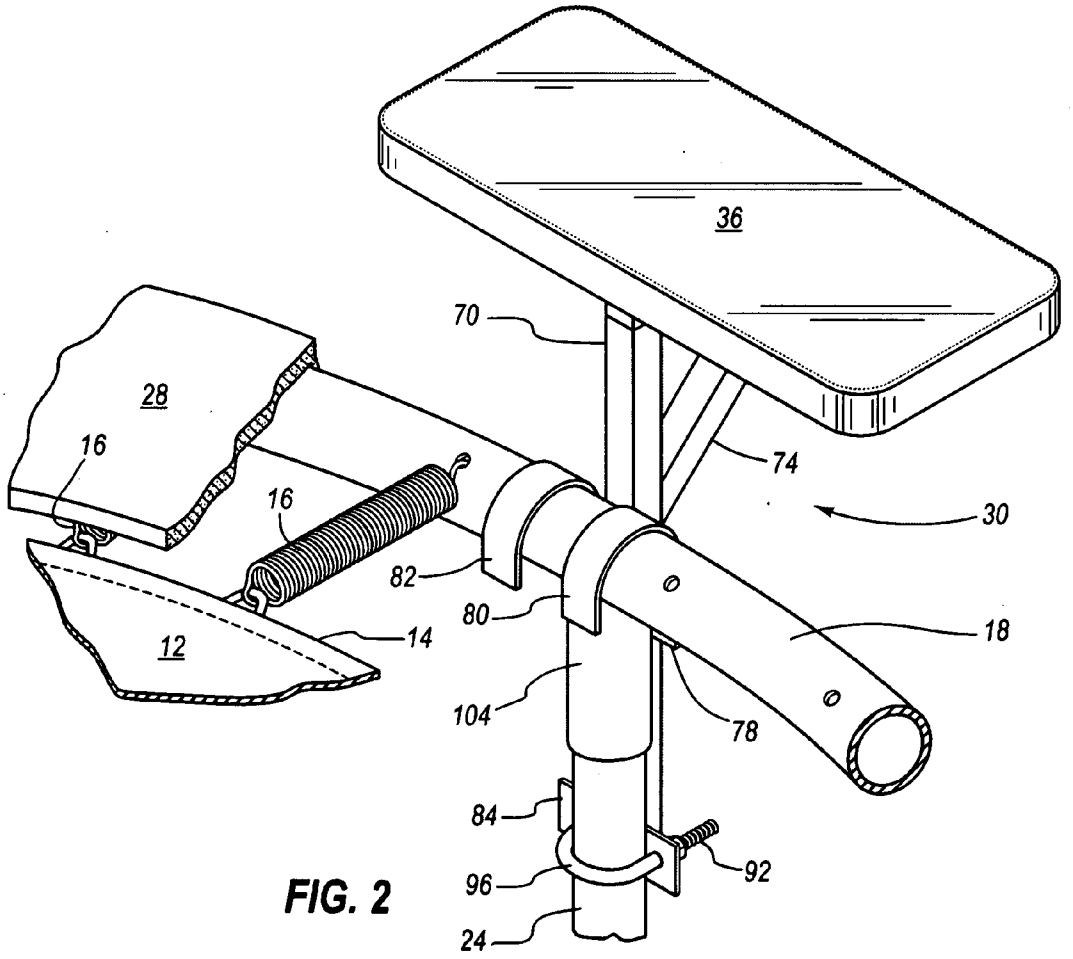
FIG. 1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70
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FIG. 2

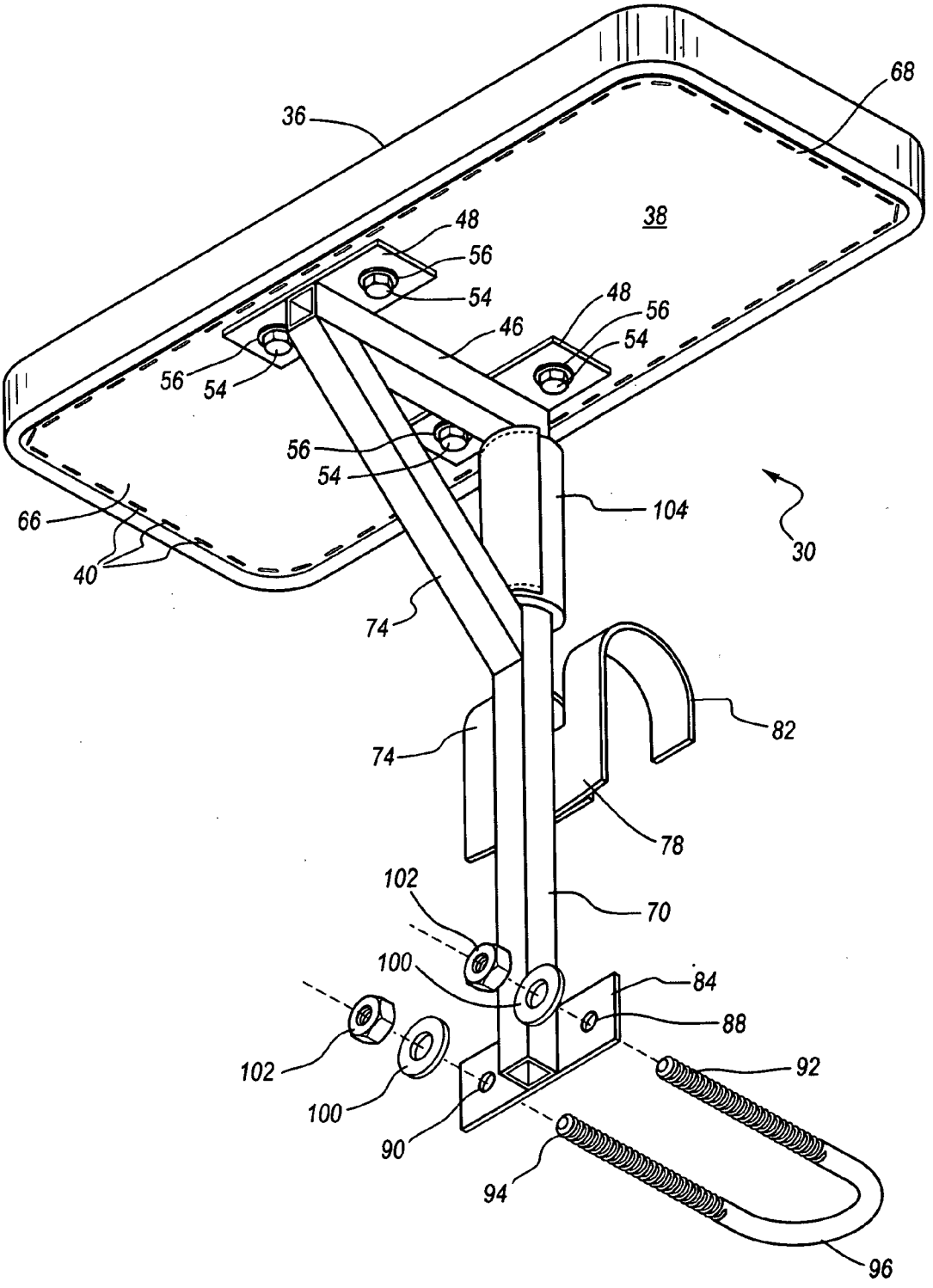
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FIG. 3

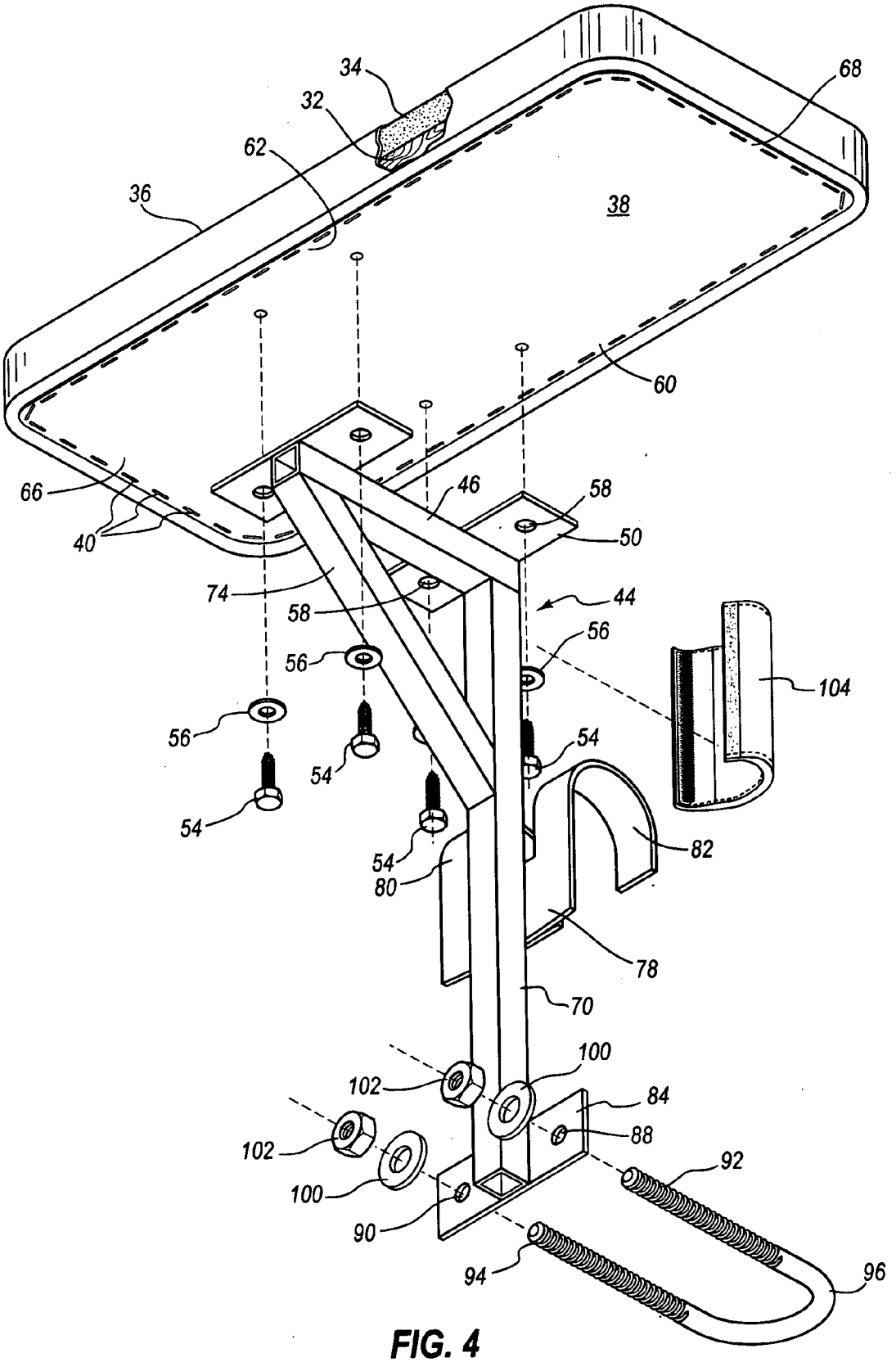
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FIG. 4

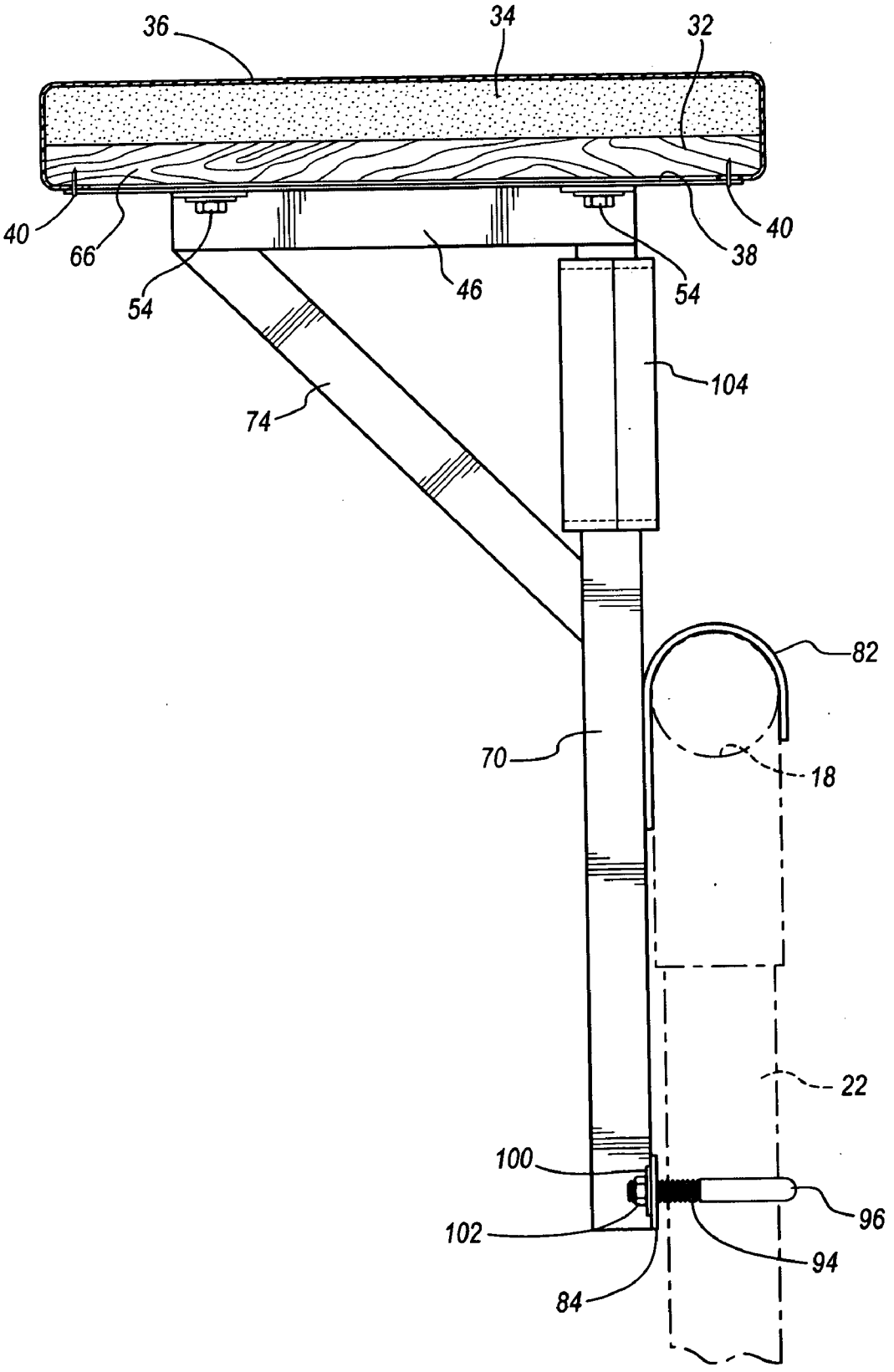

FIG. 5

TRAMPOLINE WITH SEATING

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable.

REFERENCE TO MICROFICHE APPENDIX

[0003] Not Applicable.

BACKGROUND OF THE INVENTION

Field of the Invention

[0004] This invention relates to trampolines.

[0005] Trampolines comprising a flexible material forming a jumping surface tautly and resiliently stretched within a supporting framework are well known.

[0006] Trampolines have proven very popular as exercise devices and for entertainment purposes.

[0007] Some trampolines are installed to be at ground level with a hole in the ground over which the jumping surface is stretched between a surrounding frame and with spaced resilient grippers securing the jumping surface to the frame.

[0008] Trampolines also come in different sizes, with the jumping surface ranging from the small areas of mini tramps for use by a single jumper to much larger trampolines with jumping surfaces that will permit as many as six, eight or even more jumpers to perform simultaneously.

[0009] It is believed that the majority of these commonly trampolines in use are above ground trampolines with a jumping surface supported on legs ard of a size that will safely allow two or even up to four jumpers to perform on the jumping surfaces at the same time. If more than the safely allowed number of jumpers are desirous of jumping, it becomes necessary for the jumpers to take turns. This generally means that people are jumping on the jumping surface for a period of time and then, after completion of their jumping, climbing down off the trampoline. At the same time other people who have waited for a turn to jump are often climbing onto the trampoline and preparing to jump.

[0010] The rotation of jumpers from ground to jumping surface and back to ground often results in collision between jumpers and injuries resulting from falls. In addition, time that could be spent on the jumping surface is often wasted as the rotating jumpers mount and dismount from the trampoline jumping surface.

BRIEF SUMMARY OF THE INVENTION

OBJECTS OF THE INVENTION

[0011] A principal object of the invention is to provide a trampoline on which one or more persons can jump on a jumping surface while another person or other people are resting on the trampoline support structure off the jumping surface and out of the way of the person or persons jumping.

[0012] Another object of the present invention is to provide a trampoline that will allow jumpers to rotate on and off a jumping surface and on and off seating provided on the support frame for the trampoline.

[0013] Yet another object is to provide a trampoline having an easily installed and easily removed seat, or a plurality of such seats, that will support persons sitting thereon outside of the periphery of the trampoline frame. The seat or seats will support such person or persons even as another person, or a plurality of people are jumping on the jumping surface of the trampoline.

FEATURES OF THE INVENTION

[0014] To achieve the aforementioned objects, the trampoline of the invention has the usual, tautly stretched jumping surface and surrounding support frame. Resilient means, most commonly, coil springs. secure the periphery of the jumping surface to the surrounding support frame and legs extend from the support frame to hold the frame and jumping surface in a stable condition and at a desired height, above ground or a floor.

[0015] At least one seat structure is attached to the surrounding support frame and a trampoline leg, with a seat surface positioned outwardly of the surrounding support frame and outside the outer periphery of the jumping surface.

[0016] Preferably, the seat structure is readily secured to the surrounding frame and a trampoline leg. It will be apparent that more than one seat assembly can be attached to the surrounding support frame and a support leg to allow a number of persons to sit on the seat surface while one or more persons are jumping on the jumping surface.

[0017] Each person sitting on a seat surface can rest his or her feet on the padded cover commonly provided over the top of the resilient means (springs). The sitting person's foot will not adversely affect operation of the resilient means and will not extend onto the jumping surface to limit the safe jumping surface area available to the person or persons jumping.

[0018] The seat structure preferably includes a rigid, strong seat base having a padded upper seating surface.

[0019] A support bar has one leg that extends across the seat base bottom from a front edge to a rear edge of the seat base. Another leg of the support bar extends downwardly from a front edge of the seat. Hooks appropriately placed along the length of the downwardly extending support bar hook over the surrounding support frame and hold the seat at a desired seating height above the top of the jumping surface. The seat base is then cantilevered outwardly of the jumping surface.

[0020] Clamping structure at the bottom of the downwardly leg of the support bar secures the seat assembly to a depending trampoline leg member and holds the hooks securely on the surrounding support frame.

[0021] Additional objects and features of the invention will become apparent to persons skilled in the art to which the invention pertains from the following detailed description and drawings.

THE DRAWINGS

[0022] In the drawings:

[0023] FIG. **1** is a perspective view of the trampoline of the invention, including a pair of seat structures;

[0024] FIG. **2**, an enlarged fragmentary perspective view showing a seat structure, a surrounding support structure (shown fragmentarily), a resilient jumping surface (shown fragmentarily), and springs connecting the surrounding support frame and a jumping surface (shown fragmentarily);

[0025] FIG. **3**, an exploded fragmentary, perspective view taken from beneath the seat of a seat structure;

[0026] FIG. **4**, a view like that of FIG. **3**, but showing the seat exploded from the seat structure; and

[0027] FIG. **5**, a side elevation view of the seat structure.

DETAILED DESCRIPTION

[0028] Referring Now to the Drawings

[0029] In the illustrated preferred embodiment of the invention, the trampoline, shown generally at **10**, includes a tautly stretched, flexible, durable, jumping surface **12**. While the outer periphery of the jumping surface of different trampolines may take different shapes, the outer periphery **14** of the jumping surface shown at **12** is circular.

[0030] Jumping surface **12** is connected by springs **16** spaced around the periphery to a surrounding support frame **18**. The number of springs **16** attached between the jumping surface and the surrounding support frame **18** and the size of the springs is shown to be that required to hold the jumping surface **12** in a taut condition.

[0031] The surrounding support frame **18** (here shown to be of tubular metal construction) is mounted on spaced apart, U-shaped trampoline legs **20**. The legs support the jumping surface and surrounding frame held above ground or floor at a desired height. The U-shaped trampoline legs **20** have spaced apart upright members **22** and **24** secured at their upper ends to the surrounding support frame and interconnected at their other ends by a ground or floor engaging member **26**.

[0032] In conventional fashion, a padded cover **28** overlies the surrounding support frame **18**, and the springs **16** to protect jumpers against injuries that could occur if they engage the frame or springs, while jumping.

[0033] As shown in FIG. **1**, a pair of seat structures **30** are supported by the surrounding support frame **18** to provide seating for persons not currently jumping on the jumping surface **12**.

[0034] Each seat structure **30** includes a rigid seat base **32** of desired width. The seat base may be wide enough to seat one adult, or two children, for example. Alternatively, the seat base may have another desired width.

[0035] The upper surface of the seat base **32** has padding **34** thereon and a cover **36** fitted over the padding **34** is secured to a bottom surface of the seat base with staples **40**. Thus, the seat base preferably has a cushioned upper surface although it will be apparent that padding and cover are optional.

[0036] An L-shaped support bar **44** has one leg **36** extending centrally across the bottom surface **38** of the seat base **32**. Transversely extending plates **48** and **50** wielded to opposite ends of the leg **46** and screws **54**, are inserted through washers **56** and holes **58** in opposite ends of the transverse plates **48** and **50**, and are secured into the seat base **32**, thereby securing leg **46** to the seat base **32**. The leg **46** is positioned to extend from beneath a front edge **60** of the seat base **32** to beneath a rear edge **62** of the seat base. The leg **46** is mounted to extend across the seat base centrally between opposite ends **66** and **68** of the seat base.

[0037] The other leg **70** of support bar **44** extends downwardly from the end of leg **46** beneath the front edge **60** of the seat base **32**.

[0038] A diagonal brace **74** extends from the free end of leg **46** to intermediate the length of leg **70** to strengthen the seat structure **30**.

[0039] A plate **78** is fixed to a front surface **78** of leg **70** and a pair of spaced apart hooks **80** and **82** extend from plate **78**. Hooks **80** and **82** are sized to fit snugly over the surrounding support frame **18**.

[0040] An anchor plate **84** is fixed to a lower end of leg **70** and extends outwardly beyond both sides of the leg.

[0041] Holes **88** and **90**, through the anchor plate **84** receive the threaded ends **92** and **94** of a U-clamp **96**. U-clamp **96** is sized to straddle a vertical leg **22** or **24** of a trampoline leg **20** and to then have its ends **92** and **94**, respectively inserted through the holes **88** and **90**. Lock washers **100** are inserted on the ends **92** and **94** and nuts **102** are threaded onto the ends **92** and **94** to pull the U-clamp tightly against the trampoline leg and to keep the hooks **80** and **82** from disconnecting from the surrounding support frame **18**.

[0042] A cushioned pad **104** may be fitted over the upper end of leg **70**, above the hooks **80** and **82** so that a jumper otherwise engaging the upper support leg will not be seriously hurt.

[0043] With the seat structure **30** positioned and mounted as described, the front edge of the seat base is above a portion of the surrounding support frame. The seat base is cantilevered away from the surrounding support frame and the jumping surface while being supported by the surrounding support frame.

[0044] Although a preferred embodiment of our invention has been herein described, it is to be understood that the present disclosure is by way of example and that variations are possible without departing from the subject matter coming within the scope of the following claims, which subject matter we regard as our invention.

1. (canceled)

2. (canceled)

3. A trampoline as in claim **12**, further including

clamping means affixed to the support bar below the hook; and

means securing said support bar below said hook to a trampoline leg.

4. A trampoline as in claim **3**, wherein the means below the hook securing the support bar to a trampoline leg is a clamp.

5. A trampoline as in claim **4**, wherein the support bar is L-shaped with a first leg secured to a bottom of the seat base and extending across said bottom and a second leg extending downwardly from one end of the first leg to have the hook affixed intermediate its leg and the clamp affixed to a bottom end of said second leg.

6. A trampoline as in claim **5**, further including

a diagonal brace rigidly interconnecting the free end of the first leg to the second leg intermediate the length of said second leg.

7. A trampoline as in claim **6**, wherein

the seat base has padding covering an upper surface thereof and a cover enclosing said padding.

8. (canceled)

9. A seat as in claim **14**, wherein

the support bar further includes clamping means at the end of the support bar opposite the seat base, said clamping means providing means to secure said support bar to a trampoline leg.

10. A seat as in claim **9**, wherein

the support bar is L-shaped and has one leg fixed to the bottom surface of the seat base.

11. A seat as in claim **10**, wherein

the seat base has padding on the upper surface thereof; and

a cover encloses said padding.

12. A trampoline comprising
a jumping surface of strong, durable, flexible material;
a surrounding support frame around a periphery of the jumping surface;
resilient means connecting said periphery of said jumping surface to said surrounding support frame, whereby said jumping surface is tautly stretched;
trampoline legs extending downwardly from and spaced around said surrounding support frame; and
seat means including
a seat base;
support means securing said seat base to be supported on said surrounding support frame and with said seat surface extending outwardly from said surrounding support frame and said jumping surface, said support means including
a support bar extending downwardly from seat base and
at least one hook projecting from intermediate the length of the support bar and hooked over the surrounding support frame.

13. A trampoline comprising
a jumping surface of strong, durable, flexible material;
a surrounding support frame around a periphery of the jumping surface;
resilient means connecting said periphery of said jumping surface to said surrounding support frame, whereby said jumping surface is tautly stretched;
trampoline legs extending downwardly from and spaced around said surrounding support frame; and
seat means including
a seat base having a seat surface;
means securing said seat base to be supported on said surrounding support frame and with said seat surface extending outwardly from said surrounding support frame and above the plane of said jumping surface, said support means including a support bar extending downwardly from seat base and at least one hook projecting from intermediate the length of the support bar and hooked over the surrounding support frame.

14. A seat for attachment to a trampoline comprising
a solid seat base having a length and a width, a top surface and a bottom surface;
a support bar fixed to and projecting downwardly from said bottom surface and centrally of said length and at one side of said width whereby said seat base is cantilevered from said support bar; and
at least one hook on the support bar intermediate the length of the support bar, said hook extending from said support bar in the direction opposite to the direction the cantilevered seat base extends from the support bar and said hook being adapted to hook over the surrounding support frame of a trampoline, whereby said seat base will be positioned to be above the plane of and to extend outwardly of the surrounding support frame.

15. A seat for attachment to a trampoline comprising a solid seat base having a length and a width, a top surface and a bottom surface;
a support bar fixed to and projecting downwardly from said bottom surface and centrally of said length and at one side of said width whereby said seat base is cantilevered from said support bar; and
at least one hook on the support bar intermediate the length of the support bar, said hook extending from said support bar in the direction opposite to the direction the cantilevered seat base extends from the support bar and said hook being adapted to hook over the surrounding support frame of a trampoline whereby said seat base will be positioned to be above the plane of and to extend outwardly of the surrounding support frame; and
means at the end of said support bar opposite the seat base, to secure said support bar to a trampoline leg.

* * * * *