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(54) **PORTABLE PLATFORM SUSPENDED FROM A VERTICAL SUPPORT**

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(57) **ABSTRACT**

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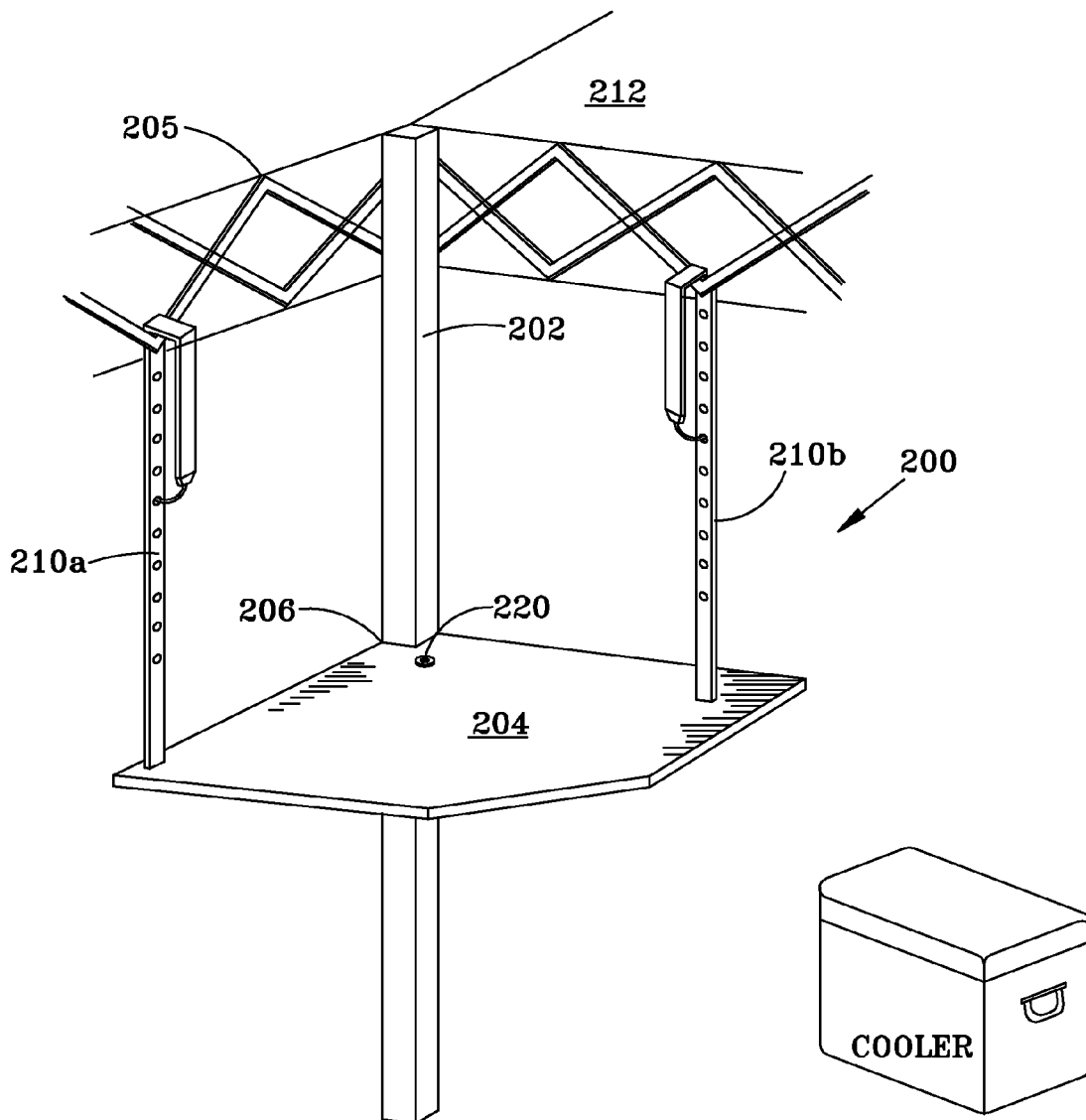
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Related U.S. Application Data

(63) Continuation-in-part of application No. 12/894,193, filed on Sep. 30, 2010.

The present invention discloses a portable platform suspended from a vertical support. The portable platform includes a substantially planar support having an engagement region. The engagement region removeably connects the substantially planar support with the vertical support at a first height. The portable platform also includes a mounting support removeably secured to the vertical support at a second height above the first height. Still further, the portable platform also includes a plurality of hanging supports. Each hanging support removeably connects the substantially planar support to the mounting support.



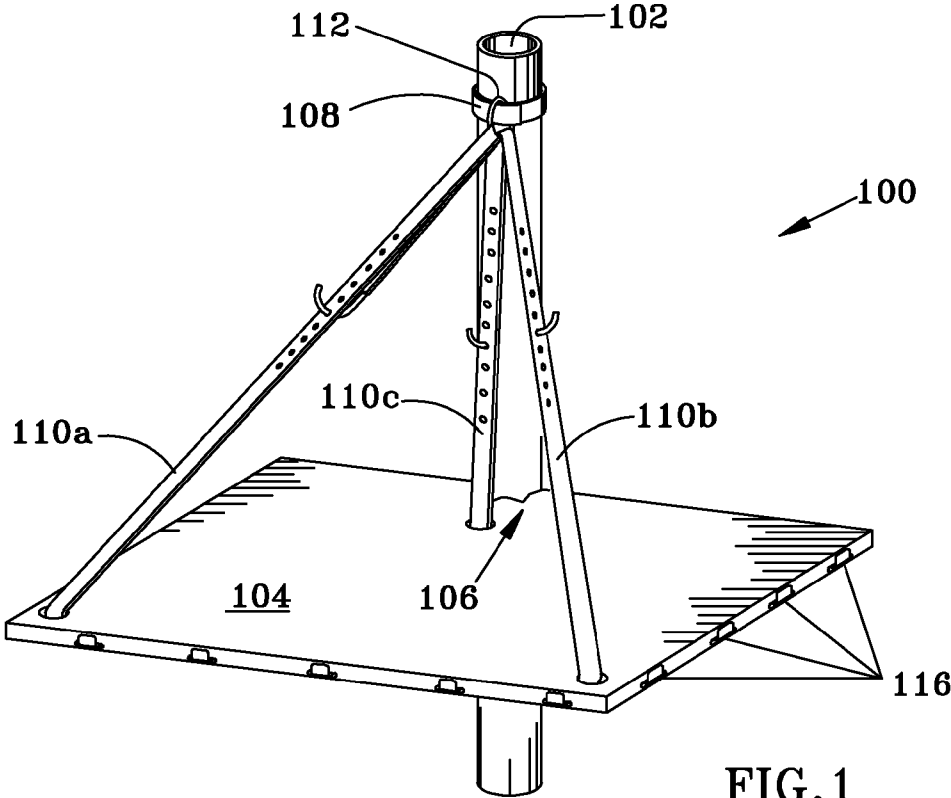


FIG. 1

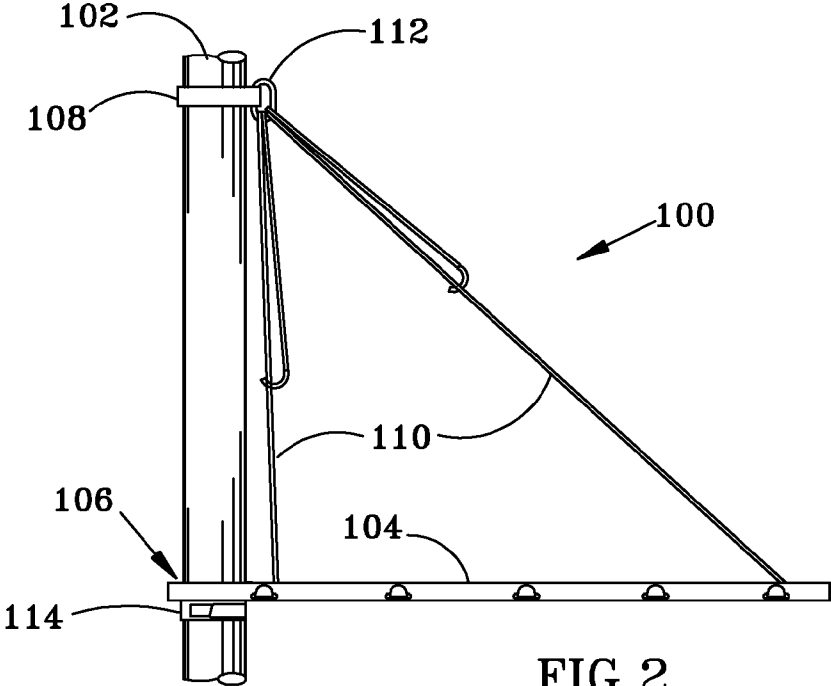
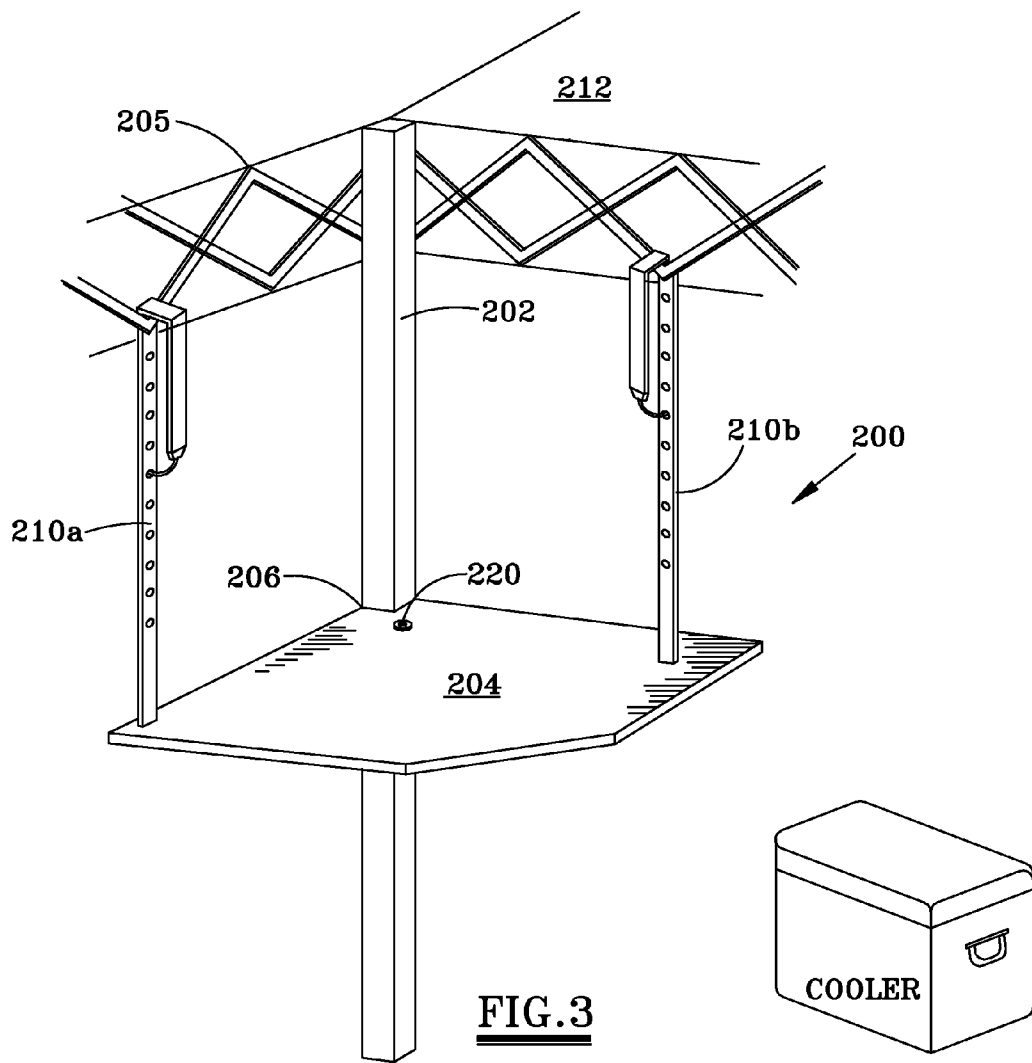
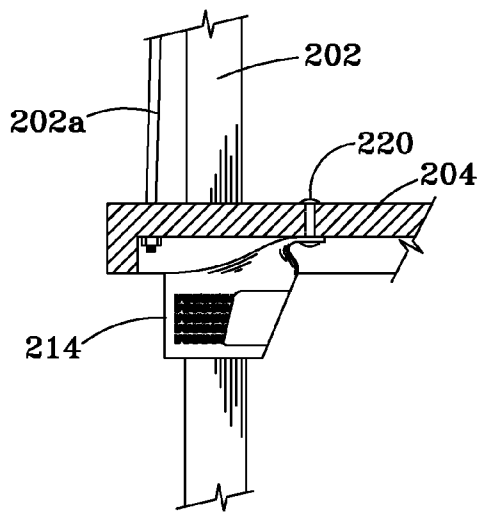
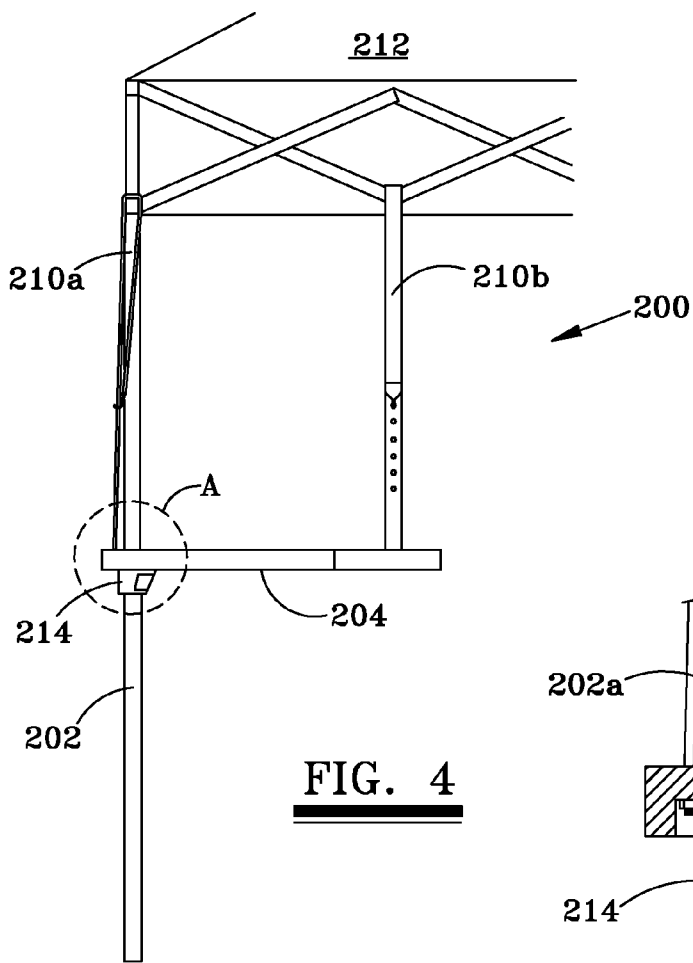
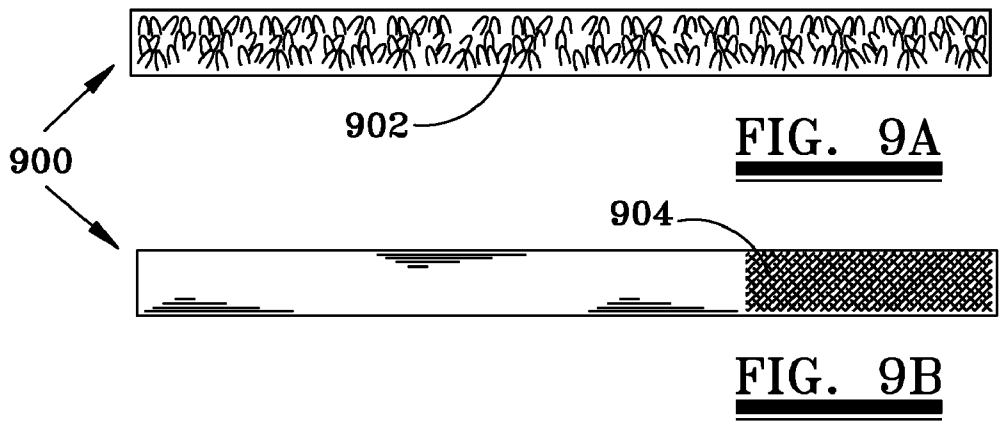
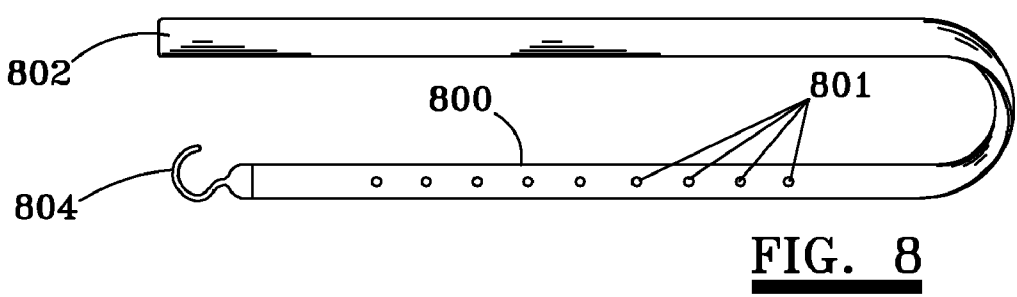
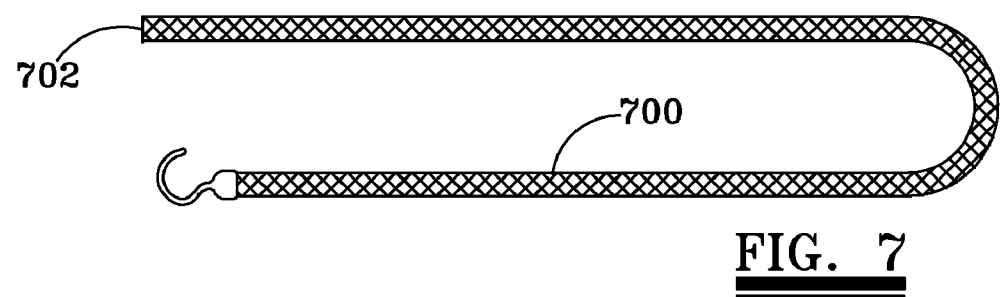
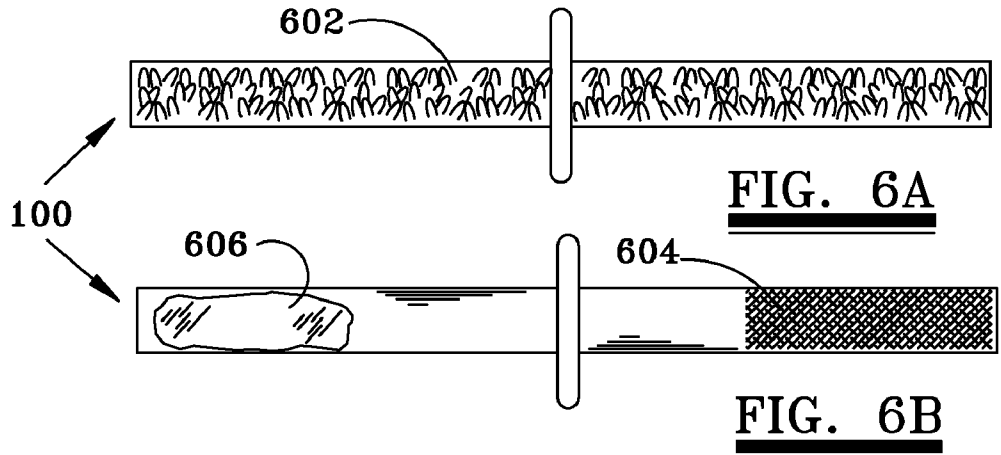


FIG. 2







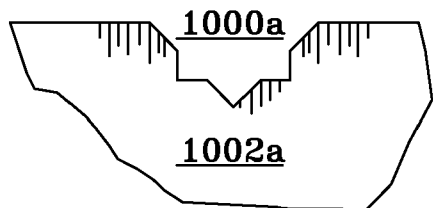


FIG. 10A

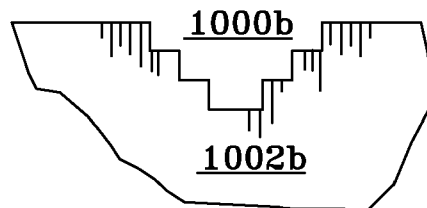


FIG. 10B

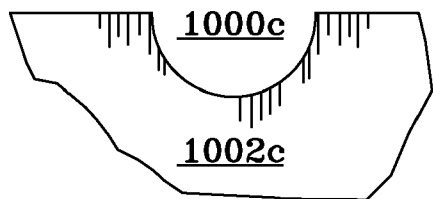


FIG. 10C

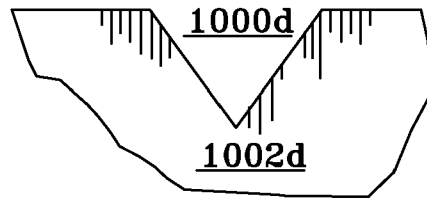


FIG. 10D

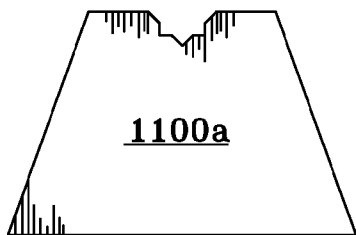


FIG. 11A

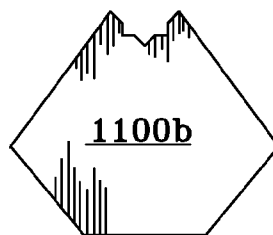


FIG. 11B

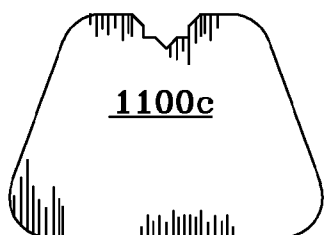


FIG. 11C

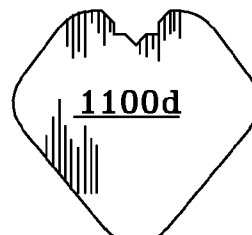


FIG. 11D

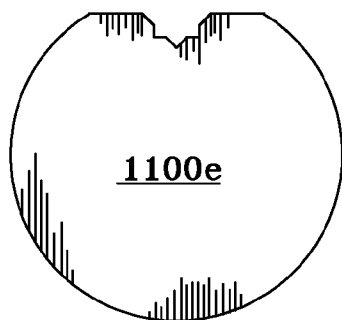


FIG. 11E

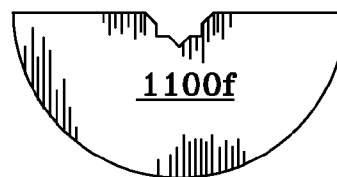


FIG. 11F

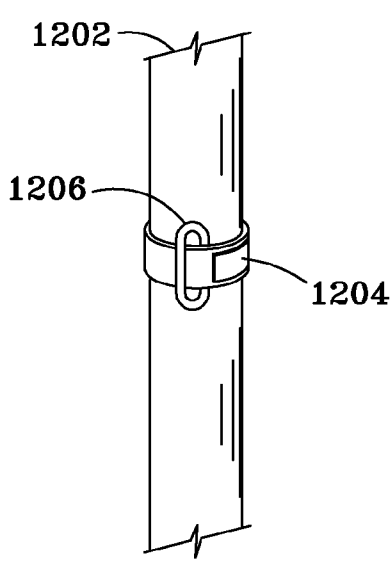


FIG. 12A

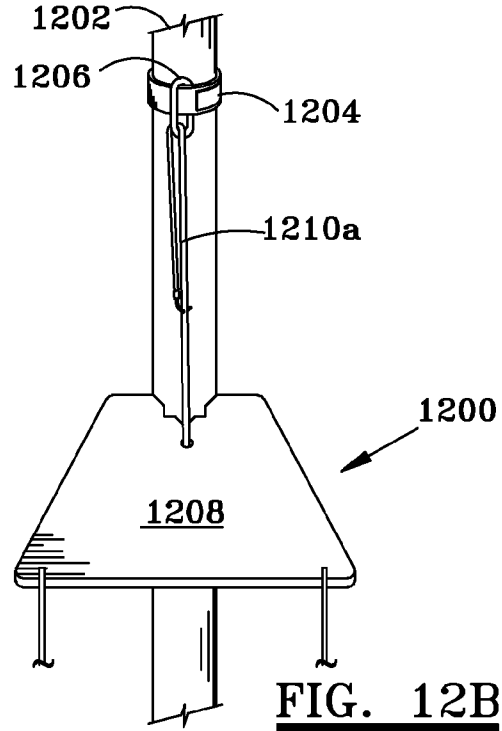


FIG. 12B

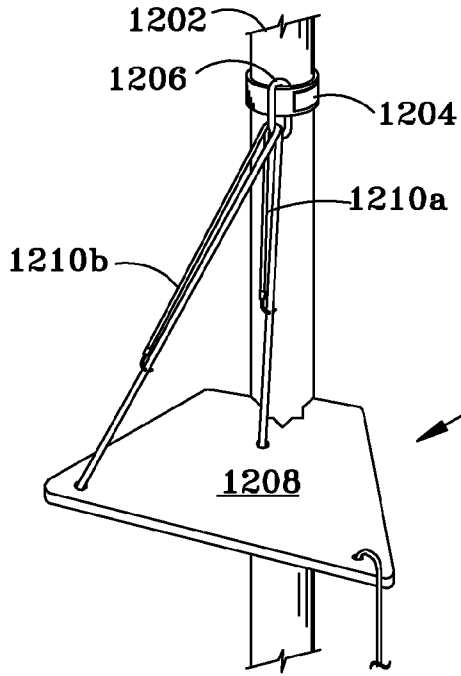


FIG. 12C

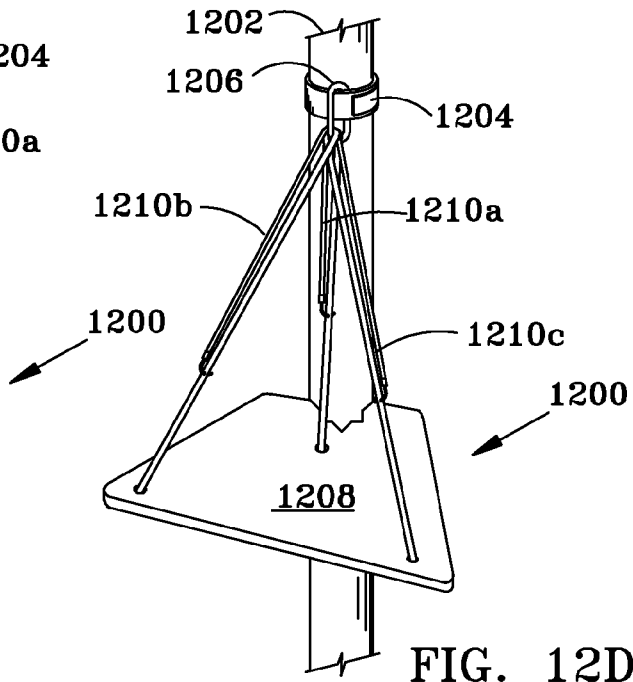


FIG. 12D

PORTABLE PLATFORM SUSPENDED FROM A VERTICAL SUPPORT

[0001] This application claims the benefit of and is a continuation-in-part of Non-Provisional application Ser. No. 12/894,193 entitled “Portable Table Suspended From A Vertical Support” and filed on Sep. 30, 2010, which is incorporated herein by reference in its entirety.

TECHNICAL FIELD

[0002] The present invention relates to the field of portable platforms suspended from vertical supports.

BACKGROUND ART

[0003] Not applicable.

SUMMARY OF INVENTION

[0004] Not applicable.

BRIEF DESCRIPTION OF DRAWINGS

[0005] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate an implementation of apparatus consistent with the present invention and, together with the detailed description, serve to explain advantages and principles consistent with the invention. In the drawings,

[0006] FIG. 1 sets forth a drawing illustrating a perspective view of a portable platform suspended from a vertical support according to embodiments of the present invention.

[0007] FIG. 2 sets forth a drawing illustrating a left orthogonal view of the portable platform suspended from a vertical support according to embodiments of the present invention.

[0008] FIG. 3 sets forth a drawing illustrating a perspective view of a portable platform affixed to a vertical support and suspended from an overhead structure according to embodiments of the present invention.

[0009] FIG. 4 sets forth a drawing illustrating a left orthogonal view of the portable platform affixed to the vertical support and suspended from an overhead structure according to embodiments of the present invention.

[0010] FIG. 5 sets forth a drawing illustrating a cutaway of Section A in FIG. 4.

[0011] FIGS. 6A and 6B set forth drawings illustrating a front and back view, respectively of an exemplary mounting support useful in portable platforms suspended from a vertical support according to embodiments of the present invention.

[0012] FIG. 7 sets forth a drawing illustrating exemplary hanging supports useful in portable platforms suspended from a vertical support according to embodiments of the present invention.

[0013] FIG. 8 sets forth a drawing illustrating exemplary hanging supports useful in portable platforms suspended from a vertical support according to embodiments of the present invention.

[0014] FIGS. 9A and 9B set forth drawings illustrating a front and back view, respectively of an exemplary fastener useful in portable platforms suspended from a vertical support according to embodiments of the present invention.

[0015] FIGS. 10A-D set forth drawings illustrating top orthogonal views of exemplary engagement regions of sub-

stantially planar supports useful in portable platforms according to embodiments of the present invention.

[0016] FIGS. 11A-F set forth drawings illustrating top orthogonal views of exemplary substantially planar supports useful in portable platforms according to embodiments of the present invention.

[0017] FIGS. 12A-D set forth drawings illustrating perspective views of a portable platform according to embodiments of the present invention.

DESCRIPTION OF EMBODIMENTS

[0018] Exemplary embodiments of portable platforms suspended from a vertical support are described herein with reference to the accompanying drawings, beginning with FIG. 1. FIG. 1 sets forth a drawing illustrating a perspective view of a portable platform (100) suspended from a vertical support (102) according to embodiments of the present invention. The vertical support (102) of FIG. 1 is a round pole that supports the portable platform (100). The use of a round pole in the example of FIG. 1 is for explanation only and not for limitation. Vertical supports useful in portable platforms according to embodiments of the present invention may include any vertical structures as will occur to those of ordinary skill in the art, including for example poles, posts, or trees. Further, vertical supports useful in portable platforms according to embodiments of the present invention may be any shape as will occur to those of skill in the art, including for example round, square, rectangular, triangular, elliptical, or a combination thereof.

[0019] The portable platform (100) of FIG. 1 includes a substantially planar support (104). The substantially planar support (104) of FIG. 1 is a panel that provides a substantially flat sitting, work, or storage surface that is substantially larger in width and breadth than in thickness. Although the substantially planar support (104) of FIG. 1 is substantially flat, the substantially planar support (104) may include one or more ridges for enhancing the structural integrity of the substantially planar support (104). Such ridges may be formed along the perimeter of the substantially planar support (104) or along the interior portion of substantially planar support (104). The pattern formed by the ridges may vary from one embodiment to another.

[0020] Typically, the ridges would be formed along the bottom surface of the substantially planar support (104), but ridges may also be formed along the top surface of the substantially planar support (104). Ridges formed along the edges of the top surface of the substantially planar support (104) may provide a containment barrier that would prevent items resting along the top of the substantially planar support (104) from falling off the edges. Similarly, such ridges would form a “lip” and serve to contain the spills of certain quantities of liquids in containers stored on the substantially planar support (104). In some other embodiments, it may be desirable that the liquids drain off of the top surface of the substantially planar support, and the ridges along the perimeter of the top surface therefore could have slots that would allow such liquids to drain off of the substantially planar support. To facilitate stacking the portable platforms, one on top of another, the outer perimeter along the bottom surface may be configured with a “reverse lip” that corresponds with the “lip” along the outer perimeter of the top surface. In this manner, the “lip” along the perimeter of the top surface of one portable platform may fit the “reverse lip” along the perimeter of the

bottom surface of a portable platform stacked on top of it to improve the stability of a stack of portable platforms.

[0021] In the example of FIG. 1, the substantially planar support (104) has an engagement region (106) that removeably connects the substantially planar support (104) with the vertical support (102) at a first height. This first height could be any height at which the substantially planar support (104) is useful to a user, which may vary from user to user and application to application. For portable platforms according to embodiments of the present invention used as a sitting device, the first height would be a height off the ground at which a user would be comfortable sitting or that would allow the user to attain the desired vantage point. The engagement region (106) of FIG. 1 connects the substantially planar support (104) to the vertical support (102) by providing an interface at the edge of the substantially planar support (104) against which the vertical support (102) may rest. While the engagement region (106) may be formed using any number of geometric configurations, the engagement region (106) of FIG. 1 includes a universal slot for allowing the substantially planar support to connect with vertical supports having a plurality of different shapes and a plurality of different sizes. Various shapes and sizes of the engagement region (106) are discussed in more detail with reference to FIGS. 10A-D.

[0022] The portable platform (100) of FIG. 1 includes a mounting support (108) removeably secured to the vertical support (102) at a second height above the first height. The mounting support (108) of FIG. 1 is a structure that attaches to the vertical support (102) to provide a place to connect hanging supports (110), which in turn provide vertical support for the substantially planar support (104). The second height at which mounting support (108) of FIG. 1 is placed will depend on the weight of the substantially planar support (104) and the load that the substantially planar support (104) supports. Generally, the lower the mounting support (108) is placed, the greater the force that the hanging supports (110) must withstand; the higher the mounting support (108) is placed, the less the force that the hanging supports (110) must withstand.

[0023] In the example of FIG. 1, the mounting support (108) is implemented as a strap having a hook-and-loop fastener such as, for example, Velcro®. Essentially, one end of the mounting support (108) is configured with the hooks of a hook-and-loop fastener, while the remaining portion, or at least other end, of the mounting support (108) is configured with the loops of a hook-and-loop fastener, typically on the side of the mounting support (108) opposite of the hooks. The mounting support (108) of FIG. 1 wraps around the entire circumference of the vertical support (102) to allow the hooks of the fastener to mate with the loops of the fastener and hold the mounting support (108) in place around the vertical support (102). Implementing the mounting support (108) of FIG. 1 with a hook-and-loop fastener is for explanation only and not for limitation. In other embodiments of the present invention, a mounting support may be implemented as a strap with a ratchet that is used to tighten and hold the strap in place around a vertical support.

[0024] In many applications in which the portable platform according to embodiments of the present invention is used as a sitting device, straps with a ratchet may be preferable because of their ability to support large amounts of weight. Each such exemplary strap may have a width between one-half of an inch to one and one-half inches and may support two hundred pounds or more. These straps are typically made

of nylon or polyester material because of their strength and light weight but other materials may also be used. One skilled in the art will understand that the strap specifications described here are for explanation only and not for limitation. Other straps having a variety of widths smaller or larger, supporting weight limits higher or lower, and made of materials other than those described above may also be useful. Implementing an exemplary mounting support with a strap and ratchet allows a user to wrap the strap, which is already connected to the ratchet, around the vertical support and connect the strap back to the ratchet. Once the strap is in place around the vertical support, a user may operate the ratchet to tighten the strap around the vertical support.

[0025] To aid a user in placing the mounting support (108) on the vertical support (102), a portion of the mounting support (108) may have an adhesive to initially hold the strap on the vertical support (102). Such an adhesive would typically be implemented using a low-tack, reusable pressure sensitive adhesive (or “re-adherable adhesive”). One of skill in the art will recognize that implementing the mounting support as a strap is for explanation only, not for limitation. Mounting supports useful in portable platforms according to embodiments of the present invention may include any structure that attaches to the vertical support (102) to provide a place to connect hanging supports (110) as will occur to those of skill in the art, including for example cords, clamps, plastic films or wraps that may be used to encircle a vertical support and hold the weight of the substantially planar support and its load as applied by the hanging supports.

[0026] The mounting support (108) of FIG. 1 includes a mounting attachment (112) to which the hanging supports (110) of the portable platform (100) connect. The mounting attachment (112) of FIG. 1 may be integrated into the structure forming the mounting support (108) or be implemented as a separate component. In the example of FIG. 1, the mounting attachment (112) is implemented as a loop that is a separate component from the strap forming the mounting support (108). In other embodiments, however, the loop may be integrated into the strap forming the mounting support (108). In FIG. 1, the strap forming part of the mounting support (108) passes through the loop forming the mounting attachment (112). The hanging supports also pass through the loop forming the mounting attachment (112) of FIG. 1. In this manner, the mounting attachment (112) of FIG. 1 provides a point at which the hanging supports (110) may removeably connect to the mounting support (108). While the mounting attachment (112) of FIG. 1 is implemented as a loop, one of skill in the art will recognize that the mounting attachment may be implemented using other structures such as a hook attached to the strap forming part of the mounting support (108). In other embodiments, the hanging supports (110) may removeably connect directly to the strap forming the mounting support (108) by passing through a space between the strap and the vertical support (102).

[0027] In the example of FIG. 1, the portable platform (100) includes a plurality of hanging supports (110a-c). Each hanging support (110) in FIG. 1 is a thin structure that transfers the weight of the substantially planar support (104) and its load to the mounting support (108). Each hanging support (110) of FIG. 1 may be implemented as a cord, strap, rope, telescoping or fixed length brace, strap with ratchet, or in any other manner as will occur to those of skill in the art. Each hanging support (110) in FIG. 1 removeably connects the substantially planar support (104) to the mounting support (108). That is, at

least one end of the hanging support (110) is capable of being disconnected from either the substantially planar support (104) or the mounting support (108), or both. In the example of FIG. 1, each hanging support (110) is implemented as a strap. The first end of the strap connects to the substantially planar support (104), and the second end of the strap has a fastener that connects to the strap to form a loop. The loop formed from the strap connects with the mounting support (108). The fastener used in FIG. 1 is a hook that connects back to the strap when the hook is inserted into preconfigured holes along the length of the strap.

[0028] In many applications in which the portable platform according to embodiments of the present invention is used as a sitting device, straps with a ratchet may be preferable embodiments of an exemplary hanging support because of their lightweight and ability to support large payloads. As mentioned above, exemplary strap width may vary but a width between one-half of an inch to one and one-half inches should be sufficient. Again, these straps are typically made of nylon or polyester material because of their strength and light weight but other materials may also be used. The strap and ratchet system should be strong enough to support the weight of an individual using the portable platform as a sitting device. One skilled in the art will understand that the strap specifications described here are for explanation only and not for limitation. Other straps having a variety of widths smaller or larger, supporting weight limits higher or lower, and made of materials other than those described above may also be useful. Implementing an exemplary hanging support with a strap and ratchet allows a user to wrap the strap, which is already connected to the ratchet, around the mounting support and connect the strap back to the ratchet. Once the strap is in place around the mounting support, a user may operate the ratchet to tighten the strap around the mounting support and hold the substantially planar support in a horizontal position to support the weight of the user.

[0029] The hanging supports (110) in the example of FIG. 1 connect to substantially planar support (104) in any number of ways as will occur to those of skill in the art. Often the manner in which the hanging supports (110) connect to the substantially planar support (104) will depend on the implementation of the hanging supports. For example, when the hanging supports are implemented using straps, the strap may connect to the substantially planar support (104) via a rivet or bolt. Still further, the strap may pass through a hole in the substantially planar support and have an anchor on the other side of the substantially planar support that prevents the strap from passing back through the hole in the substantially planar support (104). When the hanging support is implemented as a cord or rope in an embodiment, the cord or rope may pass through a hole in the substantially planar support and have an anchor attached to it or be tied in a knot that prevents the cord or rope from passing back through the substantially planar support. In other embodiments, a rope, cord, or strap could be clamped to the substantially planar support (104). In embodiments in which the hanging support is implemented as a strap with ratchet system, the strap may connect to an exemplary substantially planar support by passing through two slots in the exemplary substantially planar support. The ends of the strap may be secured at the ratchet, which would hang above the exemplary substantially planar support and in turn be connected to the mounting support. One skilled in the art, however, will understand that the ratchet may be connected to

the substantially planar support and the strap in turn will loop around the mounting support and be secured at the ratchet.

[0030] In other embodiments, each hanging support (110) is implemented as a braided rope. The first end of the braided rope connects to the substantially planar support (104), and the second end of the braided rope has a hook that punctures the rope to form a loop. The loop formed from the braided rope connects with the mounting support (108). In other embodiments, other fasteners may be used to connect the braided rope back to itself, thereby forming a loop that connects to the mounting support (108). These fasteners may be implemented as cable ties, wire ties, quick ties, clamps, a ratchet system, or any other fastener as will occur to those of skill in the art.

[0031] In the portable platform (100) of FIG. 1, there are three hanging supports (110). One of the hanging supports (110c) connects to the substantially planar support (104) adjacent to the engagement region (106) to prevent the substantially planar support (104) from sliding down the vertical support (102) under its own weight or when a load is applied. The other two hanging supports (110a,b) connect to the substantially planar support (104) at the corners of the substantially planar support (104) to provide a broad range of stability with respect to various load distributions.

[0032] In the example of FIG. 1, the substantially planar support (104) includes several hooks (116) along the edges of the substantially planar support (104). These hooks (116) of FIG. 1 may be used to hang a variety of components associated with the portable platform (100) or other items as will occur to those of skill in the art. For example, one of the hooks (116) may be used to hang a towel, goggles, or keys when the portable platform (100) is used near water. When using the portable platform (100) as a substantially planar support on which to set a portable barbeque pit at waist level, the hooks (116) may be used to hang the barbeque equipment lid, cooking utensils, towels or rags as will occur to those of skill in the art. Still further, the hooks (116) may be used to attach several extensions to the bottom of the portable platform (100) that, in turn, connect to another substantially planar support beneath the portable platform (100). The top of these extensions could be secured to the hooks (116) and extend downward from the substantially planar support (104). The bottom of the extensions could secure a substantially planar support of similar shape and size as the substantially planar support (104), thereby form a shelf beneath the substantially planar support (104). In this manner, one would be able to daisy-chain two or more substantially planar supports together to provide several vertically stacked portable shelves.

[0033] The portable platform (100) in the example of FIG. 1 also includes a fastener (not shown in FIG. 1) for removably securing the substantially planar support (104) to the vertical support (102) when connected to prevent the substantially planar support (104) from moving away from the vertical support (102). For further explanation, the fastener is described with reference to FIG. 2. FIG. 2 sets forth a drawing illustrating a left orthogonal view of the portable platform (100) suspended from a vertical support (102) according to embodiments of the present invention. The portable platform (100) of FIG. 2 is similar to the portable platform (100) of FIG. 1 and is comprised of similar components: a substantially planar support (104) having an engagement region (106); the engagement region (106) removably connecting the substantially planar support (104) with the vertical support (102) at a first height; a mounting support (108) remove-

ably secured to the vertical support (102) at a second height above the first height; and a plurality of hanging supports (110) such that each hanging support (110) removeably connects the substantially planar support (104) to the mounting support (108).

[0034] The portable platform (100) of FIG. 2 also includes a fastener (114) for removeably securing the substantially planar support (104) to the vertical support (102) when connected to prevent the substantially planar support (104) from moving away from the vertical support (102). The fastener (114) of FIG. 2 is implemented as a strap having a hook-and-loop fastener. The strap is of sufficient length to encircle the vertical support (102), and the hook-and-loop fastener secures the strap around the vertical support (102). The fastener (114) of FIG. 2 is mounted at one end to the underside of the substantially planar support (104) using a rivet, clamp, or any other mounting technique as will occur to those of skill in the art. The other end of the fastener (114) wraps around the vertical support (102) and attaches to itself via the hook-and-loop fastener. One of ordinary skill in the art will recognize, however, that the fastener (114) may be implemented in other ways such as, for example, a clamp or a latch that mounts to the edge of the substantially planar support (104) facing the vertical support (102) and extends around the backside of the vertical support (102) to secure the substantially planar support (104) to the vertical support (102). In still other embodiments, the fastener may be implemented as a strap with a ratchet that is used to tighten and hold the strap in place around a vertical support.

[0035] One skilled in the art will note that with the addition of the fastener (114), the need for a hanging support (110) adjacent to the engagement region (106) is minimized or eliminated. However, having additional hanging supports may be useful to provide backup stabilization should the fastener (114) fail because of the load on the substantially planar support (104).

[0036] FIG. 3 sets forth a drawing illustrating a perspective view of a portable platform (200) affixed to a vertical support (202) and suspended from an overhead structure (205) according to embodiments of the present invention. The overhead structure (205) of FIG. 3 is the lattice frame of a canopy (212) under which the portable platform (200) is configured. Other overhead structures (205) as will occur to those of skill in the art may also be useful in accordance with embodiments of the present invention such as, for example, the frame of an overhead awning, arbor, overhead balcony, or other overhead frame.

[0037] The portable platform (200) of FIG. 3 includes a substantially planar support (204) having an engagement region (206). The substantially planar support (204) of FIG. 3 is a panel that provides a substantially flat work or storage surface. The substantially planar support (204) of FIG. 3 may include one or more ridges for enhancing the structural integrity of the substantially planar support (204). In addition to providing structural integrity, the ridges that may be configured around the edges of the substantially planar support (204) may also serve to retain items or loose liquids that may be placed or spilled on the top surface of the substantially planar support (204).

[0038] The engagement region (206) of FIG. 3 removeably connects the substantially planar support (204) with the vertical support (202) by providing an interface at the edge of the substantially planar support (204) against which the vertical support (202) may rest. In the example of FIG. 3, the engage-

ment region (206) removeably connects the substantially planar support (204) with a leg of a portable canopy (212). While the engagement region (206) may be formed using any number of geometric configurations, the engagement region (206) of FIG. 3 includes a universal slot for allowing the substantially planar support to connect with vertical supports having a plurality of different shapes and a plurality of different sizes. Various shapes and sizes of the engagement region (106) are discussed in more detail with reference to FIGS. 10A-D.

[0039] The portable platform (200) of FIG. 3 includes a fastener (reference 214 in FIGS. 4 and 5) for removeably securing the substantially planar support (104) to the vertical support (202) when connected. In this manner, the fastener prevents the substantially planar support (104) from moving away from the vertical support (102) and provides both lateral and vertical stability for the substantially planar support (104). In the example of FIG. 3, the fastener (not shown) is mounted to the underside of the substantially planar support (204) using a rivet (220), but other mounting technique as will occur to those of skill in the art may also be useful such as for example, clamps, or screws. Still further, the fastener may be attached to the substantially planar support (204) without mounting such as by passing the fastener through a slot in the substantially planar support (204).

[0040] The portable platform (200) of FIG. 3 includes one or more hanging supports (210). Each hanging support (210) removeably connects the substantially planar support (204) to the overhead structure (205), which in the example of FIG. 3, is the frame of the portable canopy (212). In the example of FIG. 3, each hanging support (210) is implemented as a strap. Each strap in FIG. 3 has a plurality of holes. One end of the strap connects to the substantially planar support (204), while the second end of the strap has a hook that attaches to one or more of the holes to form a loop that wraps around a portion of the overhead structure (212). One skilled in the art will note that in some embodiments, each hanging support (210) may be implemented using a retractable strap to aid disassembly and storage of the portable platform (200).

[0041] Although not shown in FIG. 3, the portable platform (200) may include a hook, or other point of attachment as will occur to those of skill in the art, under the substantially planar support (204). A weight may then be attached underneath the substantially planar support (204) to stabilize the portable platform (200) and any structure to which it is attached from forces imposed by wind, animals or items colliding with the portable platform or the structure to which it is attached, or any other forces that one of ordinary skill in the art would recognize could destabilize the portable platform (200) or the structure (212). The amount of the weight would vary depending on the hazards in an environment surrounding the portable platform (200). Generally, higher amounts of weight applied to the substantially planar support (204) result in a more stable system. However, the weight cannot be so high that the structural integrity of the portable platform (200) and the structure (212) is compromised.

[0042] As mentioned above, the fastener of the portable platform (200) is described further with reference to FIGS. 4 and 5. FIG. 4 sets forth a drawing illustrating a left orthogonal view of the portable platform (200) affixed to the vertical support (202) and suspended from an overhead structure (212) according to embodiments of the present invention. FIG. 4 illustrates the fastener (214) of the exemplary portable

platform (200) that removeably secures the substantially planar support (204) to the vertical support (202) when connected.

[0043] FIG. 5 sets forth a drawing illustrating a cutaway of Section A in FIG. 4. In the example of FIG. 5, the fastener (214) is implemented as a strap having a hook-and-loop fastener. One end of the strap mounts to the substantially planar support (204) via a rivet (220), but other mounting techniques may be used as will occur to those of skill in the art. The strap is of sufficient length to encircle the vertical support (202), and the hook-and-loop fastener secures the strap around the vertical support (202).

[0044] In other embodiments, the portable platform (200) may utilize a fastener implemented as a latch having a first end and a second end. The first end of the latch may be mounted to a vertical edge of the substantially planar support (204) adjacent to the vertical support (202) using a hinge or flexible connection. The second end of the latch may removeably connect to the substantially planar support (204) along the vertical edge of the substantially planar support (204) adjacent to but on the opposite side of the vertical support (202). The latch may be removeably secured to the substantially planar support (204) by a variety of mechanisms as will occur to those of skill in the art such as, for example, a pin. In such a configuration, the latch is configured to secure the vertical support (202) to the substantially planar support (204) when the second end is connected to the substantially planar support (204). That is, the latch closes around the vertical support (202) to keep the substantially planar support (204) connected with the vertical support (202).

[0045] FIGS. 6A and 6B set forth drawings illustrating a front and back view, respectively of an exemplary mounting support (600) useful in portable platforms suspended from a vertical support according to embodiments of the present invention. The mounting support (600) of FIGS. 6A and 6B is implemented as a strap with a hook-and-loop fastener. The front side of the mounting support (600) depicted in FIG. 6A illustrates the fine loops (602) that are snagged by the small hooks (604) depicted in FIG. 6B. The back side of the mounting support (600) also includes an adhesive (606) to initially hold the strap on the vertical support (102). As previously described, such an adhesive would typically be implemented using a low-tack, reusable pressure sensitive adhesive (or "re-adherable adhesive").

[0046] FIGS. 7 and 8 set forth drawings illustrating exemplary hanging supports useful in portable platforms suspended from a vertical support according to embodiments of the present invention. The hanging support (700) of FIG. 7 is implemented as a braided cord. One end (702) of the hanging support (700) is attached to the substantially planar support of a portable platform according to embodiments of the present invention. The end (702) may be attached via a rivet, screw, clamp, or some other mounting technique as will occur to those of skill in the art. In other embodiment, the end (702) may pass through a slot in the substantially planar support of a portable platform according to embodiments of the present invention and then be configured in a knot or tied to a washer to prevent the hanging support from sliding back through the substantially planar support. Such examples are for explanation only and not for limitation.

[0047] The hanging support (800) of FIG. 8 is implemented as a strap having a plurality of holes (801). The first end (802) of the hanging support (800) connects to the substantially planar support of a portable platform according to embodi-

ments of the present invention in the manner similar to that described above with reference to FIG. 7 or any other manner as will occur to those of skill in the art. The second end (804) has a hook that attaches to one or more of the holes to form a loop that wraps around a portion of a mounting support of a portable platform according to embodiments of the present invention.

[0048] FIGS. 9A and 9B set forth drawings illustrating a front and back view, respectively of an exemplary fastener (900) useful in portable platforms suspended from a vertical support according to embodiments of the present invention. The fastener (900) of FIGS. 9A and 9B is implemented as a strap with a hook-and-loop fastener. The front side of the fastener (900) depicted in FIG. 9A illustrates the fine loops (902) that are snagged by the small hooks (904) depicted in FIG. 9B.

[0049] FIGS. 10A-D set forth drawings illustrating top orthogonal views of exemplary engagement regions (1000) of substantially planar support s (1002) useful in portable platforms according to embodiments of the present invention. The engagement region (1000a) of FIG. 10A is formed from substantially planar support (1002a) and is configured by removing a large triangular region from the edge of the substantially planar support (1002a) and removing two smaller triangular regions from the edges created by removing the first larger triangular region. The engagement region (1000b) of FIG. 10B is formed from substantially planar support (1002b) and is configured by removing a large rectangular region from the edge of the substantially planar support (1002b), removing a smaller rectangular region from the edge created by removing the larger rectangular region, and removing an even smaller rectangular region from the edge created by removing the smaller rectangular region. The engagement region (1000c) of FIG. 10C is formed from substantially planar support (1002c) and is configured by removing a semicircular region from the edge of the substantially planar support (1002c). The engagement region (1000d) of FIG. 10D is formed from substantially planar support (1002d) and is configured by removing a triangular region from the edge of the substantially planar support (1002d). One of skill in the art will recognize that the exemplary engagement regions (1000) of FIGS. 10A-D are for explanation only and not for limitation. Engagement regions useful in portable platforms according to embodiments of the present invention may be implemented in a variety of shapes and sizes to allow such portable platforms to be suspended from a variety of vertical supports.

[0050] FIGS. 11A-F set forth drawings illustrating top orthogonal views of exemplary substantially planar support s (1100) useful in portable platforms according to embodiments of the present invention. The substantially planar support (1100a) of FIG. 11A is substantially trapezoidal in shape. The substantially planar support (1100b) of FIG. 11B is substantially pentagonal in shape. The substantially planar support (1100c) of FIG. 11C is substantially trapezoidal in shape with rounded corners. The substantially planar support (1100d) of FIG. 11D is substantially pentagonal in shape with rounded corners. The substantially planar support (1100e) of FIG. 11E is substantially circular in shape. The substantially planar support (1100f) of FIG. 11F is substantially semi-circular in shape.

[0051] FIGS. 12A-D set forth drawings illustrating perspective views of a portable platform (1200) according to embodiments of the present invention as that portable plat-

form is installed and subsequently suspended from a vertical support (1202). As shown in FIG. 12A, the mounting support (1204) is first configured around the vertical support (1202). The mounting support (1204) of FIGS. 12A-D is implemented as a strap that has a loop-and-hook fastener. The mounting support (1204) of FIG. 12A wraps around the vertical support (1202) exposing the loops of the loop-and-hook fastener. The end of the mounting support (1204) of FIG. 12A having the hooks and being wrapped around the vertical support (1202) then attaches to the loops exposed on the mounting support (1204). In the example of FIG. 12A, the mounting support (1204) includes a mounting attachment (1206) in the form of a loop.

[0052] FIG. 12B depicts a first hanging support (1210a) connected to the substantially planar support (1208) and the mounting support (1204). One end of the first hanging support (1210a) mounts to the substantially planar support (1208), while the other end of the first hanging support (1210a) passes through the mounting attachment (1206) and connects back to itself using a hook.

[0053] FIG. 12C depicts a second hanging support (1210b) connected to the substantially planar support (1208) and the mounting support (1204). One end of the second hanging support (1210b) mounts to the substantially planar support (1208), while the other end of the second hanging support (1210b) passes through the mounting attachment (1206) and connects back to itself using a hook.

[0054] FIG. 12D depicts a first hanging support (1210c) connected to the substantially planar support (1208) and the mounting support (1204). One end of the third hanging support (1210c) mounts to the substantially planar support (1208), while the other end of the third hanging support (1210c) passes through the mounting attachment (1206) and connects back to itself using a hook.

[0055] In other embodiments, a portable platform according to embodiments of the present invention may be affixed to a vertical support using one or more braces. Such an exemplary portable platform may include a substantially planar support having one or more engagement regions. Each engagement region of the exemplary platform may removeably connect to the substantially planar support with the vertical support. The exemplary portable platform may include a fastener for removeably securing the substantially planar support to the vertical support when connected. Further, the exemplary portable platform may include one or more braces such that each brace removeably connects the substantially planar support to the vertical support. These braces may be implemented as a rigid rods or telescoping supports that may be used to strengthen the structural integrity of the substantially planar support for the portable platform according to embodiments of the present invention. Each brace may be rotatably mounted to the side or the underside of the substantially planar support. While one end of each brace is typically mounted to a substantially planar support according to embodiments of the present invention, the other end of the brace may be removeably connected to the vertical support either above the substantially planar support or below.

[0056] One skilled in the art will appreciate the usefulness of embodiments of the present invention which are utilized as sitting devices. Such embodiments may be useful in hunting applications whereby a user may secured a portable platform according to embodiments of the present invention to a tree operating as a vertical support. The hanging supports of such an embodiment may be configured to operate as shoulder

straps that support the portable table on the user's back. In such a manner, a user may have a convenient, portable platform for use when waiting for prey. The portable platform may be covered with camouflage to help it remain hidden from view. In other uses, hikers or other outdoors persons may utilize such an embodiment to provide a place to rest from traversing the terrain without having to sit on the ground.

[0057] While certain exemplary embodiments have been described in details and shown in the accompanying drawings, it is to be understood that such embodiments are merely illustrative of and not devised without departing from the basic scope thereof, which is determined by the claims that follow.

We claim:

1. A portable platform suspended from a vertical support, the platform comprising:

- a substantially planar support having an engagement region, the engagement region removeably connecting the substantially planar support with the vertical support at a first height;
- a mounting support removeably secured to the vertical support at a second height above the first height; and
- a plurality of hanging supports, each hanging support removeably connecting the substantially planar support to the mounting support.

2. The portable platform of claim 1 wherein at least one of the plurality of hanging supports connects to the substantially planar support adjacent to the engagement region.

3. The portable platform of claim 1 wherein the plurality of hanging supports further comprise only three hanging supports, one of the three hanging supports connects to the substantially planar support adjacent to the engagement region, and the other two hanging supports connect to the substantially planar support adjacent to corners of the substantially planar support.

4. The portable platform of claim 1 wherein the mounting support further comprises a strap and ratchet system.

5. The portable platform of claim 1 wherein the mounting support further comprises a mounting attachment to which the plurality of hanging supports connect.

6. The portable platform of claim 1 wherein the engagement region further comprises a universal slot for allowing the substantially planar support to connect with vertical supports having a plurality of different shapes and sizes.

7. The portable platform of claim 1 wherein each hanging support further comprises a braided rope having a first end and a second end, the first end connects to the substantially planar support, the second end having a hook that punctures the rope to form a loop, the loop connecting with the mounting support.

8. The portable platform of claim 1 wherein each hanging support further comprises a strap having a first end and a second end, the first end connects to the substantially planar support, the second end having a fastener that connects to the strap to form a loop, the loop connecting with the mounting support.

9. The portable platform of claim 1 wherein the substantially planar support further comprises one or more ridges for enhancing the structural integrity of the substantially planar support.

10. The portable platform of claim 1 further comprising a fastener for removeably securing the substantially planar sup-

port to the vertical support when connected to prevent the substantially planar support from disengaging from the vertical support.

11. The portable platform of claim 10 wherein the fastener further comprises a strap having a hook-and-loop fastener, the strap of sufficient length to encircle the vertical support, the hook-and-loop fastener securing the strap around the vertical support.

12. The portable platform of claim 1 wherein at least a portion of the portable platform presents a camouflage pattern.

13. A portable platform affixed to a vertical support and suspended from an overhead structure, the platform comprising:

- a substantially planar support having one or more engagement regions, each engagement region removeably connecting the substantially planar support with the vertical support;
- a fastener for removeably securing the substantially planar support to the vertical support when connected; and
- one or more hanging supports, each hanging support removeably connecting the substantially planar support to the overhead structure.

14. The portable platform of claim 13 wherein the substantially planar support has one engagement region, one fastener, and two hanging supports.

15. The portable platform of claim 13 wherein the engagement region further comprises a universal slot for allowing the substantially planar support to connect with vertical supports having a plurality of different sizes.

16. The portable platform of claim 13 wherein the fastener further comprises a strap having a hook-and-loop fastener, the strap of sufficient length to encircle the vertical support, the hook-and-loop fastener securing the strap around the vertical support.

17. The portable platform of claim 13 wherein each hanging support further comprises a strap having a first end and a second end, the strap having a plurality of holes, the first end

connects to the substantially planar support, the second end having a hook that attaches to one or more of the holes to form a loop that wraps around a portion of the overhead structure.

18. The portable platform of claim 13 wherein the substantially planar support further comprises one or more ridges for enhancing the structural integrity of the substantially planar support.

19. The portable platform of claim 13 wherein the overhead structure is a loop that mounts to the vertical support at a location above the engagement regions.

20. A portable platform that attaches to a vertical support, the platform comprising:

- a substantially planar support having an engagement region, the engagement region removeably connecting the substantially planar support with the vertical support at a first height, the substantially planar support comprising a fastener that secures the engagement regions to the vertical support, the fastener comprising a fastening strap and a fastening ratchet for adjusting the tension of the fastening strap around the vertical support, the substantially planar support being substantially trapezoidal in shape;
- a mounting support removeably secured to the vertical support at a second height above the first height, the mounting support comprising a mounting strap and mounting ratchet for adjusting the tension of the mounting strap around the vertical support; and
- a plurality of hanging supports, each hanging support removeably connecting the substantially planar support to the mounting support, each hanging support comprising a strap and a ratchet, the ratchet used to adjust the tension of the strap when connecting the substantially planar support to the mounting support, each hanging support connected to the substantially planar support through a separate slot in the substantially planar support.

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