VIRTUAL PRIVACY FENCE PANELS

Inventor: Margaret Allen Osipovs, Chesapeake, VA (US)

Correspondence Address:
Jeffrey K. Seto
617 Tinkerbell Rd.
Chapel Hill, NC 27514 (US)

Appl. No.: 10/082,522
Filed: Feb. 23, 2002

Publication Classification

Int. Cl. 7: E04H 17/02; B21F 27/00
U.S. Cl.: 256/45

ABSTRACT

Privacy panels that are attached to a non-privacy fence to turn the non-privacy fence into a virtual privacy fence that also provides a wind blocking function. Lightweight panels that can be decorated are hung from or otherwise attached to an existing fence so that the view of anyone trying to see through the fence is blocked. The panels may be constructed of a solid or semi-solid material or they can be made of a material that may be rolled up for storage. The panels are preferably attached to the fence with loops or Velcro straps however, other attachment means may be utilized. The panels can be made of a single material or each panel can have an inner material with one or more outer coverings. Optionally, hooks and pockets can be provided on the panels for hanging and storage of personal items.
Provide Privacy Panels

Unroll or unfold the first Panel, if required

Find all Attachment Devices for the first Panel

Place first Attachment Device around existing fence post or other portion of existing fence

Place second Attachment Device around portion of fence so that the Panel conforms to the shape of the fence

Optionally, place other Attachment Devices for the first Privacy Panel

Figure 4
A

500

Unroll or unfold the next Panel, if required

505

Find all Attachment Devices for the Panel

510

Place the first Attachment Device on the fence so that the second Panel is adjacent to first Panel, or another location on the fence

515

Place second Attachment Device around a portion of the fence so that the Panel generally conforms to the shape of the fence

520

Optionally, place other Attachment Devices for the Panel and place other Privacy Panels

Figure 5
Figure 6
VIRTUAL PRIVACY FENCE PANELS

BACKGROUND OF THE INVENTION

[0001] The present invention relates generally to privacy fences, and more specifically to privacy panels that can be attached to a non-privacy fence to turn the non-privacy fence into a virtual privacy fence.

[0002] The enclosing of land with some form of fencing material dates far back into history. Many different types of enclosures have been developed out of the desire to enclose or exclude animals, people or to provide privacy. Throughout history fences have been built of many materials including hedges, stone, concrete, wood, and wire.

[0003] The Encyclopedia Britannica defines a fence as a “barrier erected to confine or exclude people or animals, to define boundaries, or to decorate.” Timber, earth, stone, and metal are widely used for fencing. The Encyclopedia further describes the history of fences as follows:

[0004] “Fences of living plants have been made in many places, such as the hedges of Great Britain and continental Europe and the cactus fences of Latin America. In well-timbered country, such as colonial and 19th-century North America, many patterns of timber fence were developed, such as the split rail laid zigzag, the post rail, and the picket. On the East European Plain and in the western United States, fences of turf were erected that often stood for years in the absence of heavy rains. Wire, the preeminent modern fencing material, was first used in the mid-19th century, with the development of methods of mass production. Woven wire fences, affixed to wood, steel, or concrete posts, proved economical and durable (wood posts may be treated with preservative). The invention of the barbed-wire fence in the 1860s and of a machine for its manufacture in 1874 made possible effective fencing of cattle range.”

[0005] Today, fences are commonly used within and around the perimeter of commercial and residential property to form a barrier erected to confine or exclude people or animals, define boundaries, decorate, or restrict view. Many fences currently on the market have wide gaps between their posts or rails such that people can see through to the property within the fence. In certain situations, it is desirable for people not to be able to see through the fence, so that those inside the fenced area can enjoy some privacy. Privacy fences were designed to meet this need. However, many people that enjoy privacy purchase homes and other properties that already have an existing fence that is not a privacy fence around the home or property. It would be very expensive for these people to tear down the existing fence and install a privacy fence. What is needed is an inexpensive way to change a non-privacy fence into the functional equivalent of a privacy fence, a virtual privacy fence.

[0006] U.S. Pat. No. 4,143,857 to Weiner, discloses a fence which provides effective barriers to the attempts of children to climb. The non-climbable barriers contain small openings to reduce wind loading on the fence and are configured so as not to provide hand or foot holds for children. The Weiner patent also discloses a self-closing gate with a child-resistant latch. Since the disclosed barriers contain openings to reduce wind loading on the fence they do not block the view of the area inside the fenced enclosure.

[0007] U.S. Pat. No. 5,799,929 to Meglino, et al. discloses fence slats for chain link fences that are slid into channels of the chain link fence. The fence slats have a pair of stops extending outwardly that prevent movement of the slat within the channels of the chain link fence. The slats are intended to act as a windbreak and provide some privacy. The slats may only be used with chain link fences and after the slats are in place many gaps, which people can see through, still exist in the fence.

[0008] Each of the above systems suffers from a number of deficiencies. Their designs do not allow for the consumer to convert any existing fence with gaps into a privacy fence. There is a need to provide the public with an inexpensive, lightweight means to convert an existing fence, which provides a view into and out of the enclosed area, into a fence that obstructs the view into and out of the enclosed area.

SUMMARY OF THE INVENTION

[0009] A removable attachable virtual privacy fence assembly comprising two main parts; a number of generally rectangular panel elements and a means on each panel for securing the panel elements to an existing fence. Each of the panel elements is made of a flexible planar material for placement on either the inner or outer surface of the existing fence. The flexible planar material of the panel elements can be made of canvas, plastic, vinyl, polyethylene, nylon, cotton, cloth, paper, fiber and/or metal. Each panel element has top, bottom, and side edges and is large enough to cover at least a portion of the surface area of the fence. Multiple panel elements may be used to completely cover the surface area of the fence.

[0010] The panel elements of the virtual privacy fence assembly may be secured to the fence by means of one or more straps. The straps used to secure the panel elements to the fence may be Velcro straps, hooks, loops, snaps, buttons, buckles, or hooks and eyes. The straps can be secured to the panel elements by being sewn, glued, riveted, or stapled to the panel elements.

[0011] It is an object of the present invention to provide inexpensive, lightweight panels that can be easily attached to an existing non-privacy fence, so that the view of anyone trying to see through the fence is blocked. The panels may be constructed of a solid or semi-solid material or they can be made of a canvas-type or vinyl material that is stored in rolls. The panels are preferably attached to the fence with loops or Velcro straps however other means of attachment may be utilized.

[0012] It is a further object of the present invention to provide a lightweight affordable wind-block that can be attached to an existing fence via multiple attachment devices and effectively block strong winds from disturbing people and objects inside the fence.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The invention of the present application will now be described in more detail with reference to the accompanying drawings, given only by way of example, in which:
FIG. 1 illustrates an exemplary embodiment of the present privacy panel;

FIG. 2 illustrates another embodiment of the present privacy panel;

FIG. 3 illustrates other embodiments of the privacy panel;

FIG. 4 is a flow chart illustrating a method for placing the first privacy panel;

FIG. 5 is a flow chart listing the steps for placing other privacy panels; and,

FIG. 6 illustrates a privacy panel with a decorative design.

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, an exemplary embodiment of the present privacy panel 100 is shown. The panel 100 is preferably formed of a semi-rigid material that may flex but generally maintains a fixed shape and size. The panel 100 is defined by a top edge 115, left side 120, bottom edge 125, and right side 130. The two attachment devices, or straps, 105 are provided at opposite ends of the panel’s top edge 115. Straps 105 are used for attaching the present privacy panel to an existing non-privacy fence. More than two attachment devices may be required and the location of the attachment devices can be in other locations on the panels than along the top edge. Alternate strap positions 110 are shown on the sides of panel 100. Such positioning allows the privacy panel to extend the height of the fence to which the panel is attached, thereby also extending the amount of privacy that is provided. Bottom attachment devices 135 are shown as hooks that preferably are made of metal or a strong plastic and are attached to the panel 100 via an elastic strap that allows secure positioning of the panel against the existing fence. Attachment devices will be required on the bottom, as well as the top of the panel, when lightweight materials are used in the construction of the panel in order to provide a wind-blocking function. The semi-rigid material of panel 100 performs a privacy function by turning a non-privacy fence into the functional equivalent of a privacy fence. The privacy panels may be customized to fit different shapes and sizes of non-privacy fences. Preferably, each panel stretches from fence-post to fence-post. However, panels such as the one shown in FIG. 1 have loops that can be placed over individual pickets, in a picket fence for example, allowing for the use of non-customized panels as well. Panel 100 is also preferably lightweight yet heavy enough so as not to be blown about by light winds. The straps 105 shown in FIG. 1 are permanent loops. The strap itself is preferably made of canvas, rope or a plastic however, other materials can be used and the strap may be elastic. Both ends of both straps 105 are permanently attached to the panel 100 by sewing, rivets, or other well-known attachment means. In other embodiments, one end of each strap is releasably attachable to the panel. Such strap designs allow for attaching the panel to a fence when there are no posts or pickets to place a loop over. When a releasable strap is used, Velcro, snaps or other well-known releasable attachment means are used to releasably attach one end of the strap to the panel.

FIG. 2 shows another embodiment of the present privacy panel, which comprises three foldable sections 200, 201 and 202. This embodiment allows for foldable storage of large privacy panels allowing a folded panel to occupy a footprint that is only 1/4 of the unfolded panel. Two loops are provided as the attachment devices 205. As mentioned above, the loops can be permanent or the straps can be releasably attached to the panel. Thus a loop can be placed around the top of a fence-post, or one end of the strap can be detached from the panel, wrapped around any portion of the fence and reattached to the panel, to secure the privacy panel to the fence. The foldable panel 200-202 is defined by top edge 215, left side 220, bottom edge 225 and right side 230. While opposite sides 220 and 230 and opposite edges 215 and 225 are shown as being parallel, other embodiments provide for panels without parallel opposite sides or edges. Those other embodiments include customized privacy panels that have been specifically designed for a particular fence. Since fences come in many sizes and designs, it logically follows that the present privacy panels could be made to virtually any shape and size in order to conform to a particular fence. Optionally, garment hook 235 and storage pocket 240 can be provided on the present panels. Hook 235 would serve a useful purpose when the present panels are used on a fence around a swimming pool, for example. Pool patrons could use hook 235 to hang towels or clothing and prevent the towels or clothing from getting wet. Storage pocket 240 is preferably made of a mesh material and could be used to hold keys, wallets and other personal items. Both hook 235 and pocket 240 could be attached to the panel via any number of well know attaching means such as sewing, rivets, snaps or buttons.

FIG. 3 shows two privacy panels 300 and 301 that have been rolled for storage. Privacy panels 300 and 301 can be made of any number of flexible materials such as plastic, canvas, polyester, rubber, natural materials, and any combination of these, for example. Privacy panels made of lightweight material that is easy blown by the wind are provided with additional attachment devices, such as releasably attached straps, sufficient to maintain the unrolled shape of the privacy panel while the panel is attached to a fence. Since it is also an object of the present invention to provide a wind-block, panels made of lightweight materials such as canvas and vinyl will preferably have top, side and bottom attachment devices. Attachment devices 305 are shown in FIG. 3 for each of the privacy panels 300 and 301. As mentioned above, the location and number of the attachment devices can vary. A privacy panel that is designed to follow around or fit into the corner of a fence, for example, may have an attachment device in the center of the panel. Such corner panels and panels made of a lightweight material such as canvas, are examples of panels that would come equipped with more than two attachment devices.

FIG. 4 illustrates the steps for using or placing the first privacy panel. In step 400, panels that block the line of sight through a fence are provided. In step 405, if the panel is a sectional panel that has been folded or is a panel that is in a roll, then the panel is unfolded or unrolled. The next step, 410, is to find all of the attachment devices on the privacy panel. If the panel is a heavier embodiment with an inner core and one or more outer layers for example, then attachment devices may only be provided along the top edge of the panel. Of course, heavier embodiment panels may optionally have attachment devices at their bottom edges and other locations as well. In step 415, the first attachment device is placed around a portion of an existing fence. If the
attachment device is a strap in the form of a loop, then the loop is placed over and around the top of a fence-post. The existing fence should be sturdy enough to support the weight of the privacy panels. The bottom edge of the privacy panel may touch the ground or may be suspended above the ground. When no sufficient fence-posts or pickets are available, then an attachment device that allows for one end of the strap to temporarily be detached from the panel must be used. The detached end of the strap may then be intertwined with a portion of the fence and reattached to the panel, so as to hold the privacy panel to the fence. Again, the bottom edge may rest on the ground or may be suspended above the ground. In step 420, the second attachment device is either placed around a fence-post or intertwined with a portion of the fence. In step 425, other attachment devices of the first panel are optionally secured to the fence. The steps involved in placing other privacy panels are described below.

[0024] FIG. 5 illustrates the steps for placing second, third and other privacy panels. In step 500, if the next panel to be attached to the fence is a sectional panel that has been folded or is in a roll, then the panel is unfolded or unrolled. Next, step 505, all of the attachment devices on the privacy panel are identified. It is likely, but not required, that all panels of a set of panels associated with one fence will have similar features such as weight, thickness, and locations of the attachment devices. Therefore, if the first panel only had attachment devices on the top edge, then it is likely that the second and other panels will only have attachment devices on their top edges as well. Of course, this is not to say that all panels of a set of panels must have the exact same number of attachment devices. In step 510, the first attachment device of the next panel is placed around a portion of an existing fence. If the attachment device is a strap in the form of a loop, then the loop is placed over and around the top of a fence-post. If the second panel is to be placed adjacent to the first panel, then the first loop of the second panel can be placed over the same post as the last loop of the first panel. Again, when no sufficient fence-posts or pickets are available, then the attachment device would be one that allows for one end of the strap to temporarily be detached from the panel. The detached end of the strap may then be intertwined with a portion of the fence and reattached to the panel, so as to hold the privacy panel to the fence. In step 515, the second attachment device is either placed around a fence-post or intertwined with a portion of the fence. As above, the bottom edge may rest on the ground or may be suspended above the ground. Many of the present privacy panels will be secure on an existing fence after the placement of only two attachment devices. However, if more than two attachment devices are provided then the person attaching the privacy panels to the fence may optionally use the additional attachment devices to more fully secure the panel to the fence, step 520. In this last step, if more panels are to be placed on the fence then steps 500-520 are repeated.

[0025] It may only take one panel to provide the desired level of privacy. For a house in a wooded area, the backyard swimming pool, for instance, may have only a small portion visible to non-residents of the house from the driveway or the connecting street. In this case, only the portion of the fence facing the driveway or street needs to be covered with the present panel(s) to provide privacy and only one privacy panel may be required to meet this need. However, in most cases more than one panel will be used to provide privacy and turn a see through fence into a privacy fence. In such cases, the normal usage of the privacy panels is to place the panels side by side so that two adjacent privacy panels touch, and the placement of each additional panel extends the amount of privacy provided. The ultimate in privacy is achieved by covering an entire fence with privacy panels so that no one outside the fence no matter where they are located can see through to the inside of the fence. Just as panels can be customized to particular fence sizes, panels can also be customized to fit any gate size as well. So the entire fence including the gate can be covered to block the view of unwanted onlookers.

[0026] FIG. 6 illustrates the possible decorative features of the present privacy panels. Instead of only providing privacy, the present panels can also be decorated to provide a form of entertainment for those viewing the panels. Since most fences are of substantial size, the panels will generally be of equal size and therefore may act as mini billboards and more than one panel can be used in combination to create a mural, such as is shown in FIG. 6. The material that the panels 600, 601 and 602 are made of, or an outer covering of the panels, can be produced with artwork, pictures, signs and symbols thereon. Alternatively, the artwork, pictures, signs and symbols can be added after the panels are produced. Further, the panels can be manufactured to allow end users to decorate the panels themselves. Such embodiments may allow adherence of paints or films with adhesives. Panels can even be designed with similar characteristics as tack boards, so that items may be tacked or stapled to the privacy panel.

[0027] The panels 600-602 of FIG. 6 may be three individual panels that are positioned on a fence side by side, or panels 600-602 may be one sectional panel with three sections, similar to the sectional panel of FIG. 2. The decorative design on the panels may also be other designs than that shown in FIG. 6. Beach scenes and mountain landscapes are two exemplary designs that would work well with the large surface areas provided by the present panels. For users that prefer not to have such landscapes on their virtual privacy fences, the panels can be made in any number of colors as well.

[0028] The foregoing description of the specific embodiments will so fully reveal the general nature of the invention that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept. Therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology of terminology employed herein is for the purpose of description and not of limitation.

I claim:

1. A removably attachable virtual privacy fence assembly adapted to be removably attached to an existing fence, the assembly providing a privacy and wind-blocking function, said fence having a predetermined size and surface area with an outer and inner surface, said virtual privacy fence assembly comprising:

one or more generally rectangular panel elements, each panel element comprising a flexible planar material for placement on said outer or inner surface of said fence, each panel element having a top, bottom, and side
edges and being large enough to cover at least a portion of the surface area of said fence, wherein multiple panel elements may be used to completely cover the outer or inner surface area of the fence; and

each panel element comprises at least one attachment device for securing the panel element to said fence wherein the attachment device(s) are connected to the top, bottom, and/or side edges of said panel element.

2. The virtual privacy fence assembly of claim 1, wherein said attachment device(s) for securing said panel element(s) to said fence comprises a strap in the form of a loop and the loop is secured to the panel elements by being sewn, glued, riveted, or stapled to the panel elements.

3. The virtual privacy fence assembly of claim 1, wherein said attachment device comprises a strap and one end of the strap is permanently attached to the panel and the other end of the strap is releasably attached to the panel via at least one fastener selected from a group consisting of Velcro, loop and peg, snaps, buttons, buckles, and hooks and eyes.

4. The virtual privacy fence assembly of claim 1, wherein said panel elements comprise an inner material and one or more outer coverings.

5. The virtual privacy fence assembly of claim 1, wherein one or more of the panels are decorated with artwork, pictures, additional fabric and/or a mural.

6. The virtual privacy fence assembly of claim 1, wherein said panel elements are in a shape other than rectangular.

7. The virtual privacy fence assembly of claim 1, wherein said flexible planar material of said panel elements comprises at least one substance selected from a group consisting of canvas, plastic, vinyl, polyethylene, nylon, cotton, cloth, paper, fiber, polyester or metal.

8. The virtual privacy fence assembly of claim 1, wherein the attachment device comprises a rope, nylon, fabric, Velcro, fabric, polyester and/or an elastic material.

9. The virtual privacy fence assembly of claim 1, wherein one or more garment hooks and/or pockets are provided on one or more of the panels for hanging and storage of personal items.

10. The virtual privacy fence assembly of claim 1, wherein the attachment device is one or more hooks.

11. A method for providing privacy and wind-blocking through the use of a removably attachable virtual privacy fence assembly that is adapted to be removably attached to an existing fence, wherein the fence has a predetermined size, and outer and inner surfaces, the method comprising the steps of:

- designing one or more generally rectangular panel elements wherein, the panel elements are comprised of a flexible planar material for placement on the outer or inner surface of the fence, the panel elements having a top, bottom, and side edges and the panel elements may be used to completely cover the surface area of the fence; and

- securing the panel elements to the fence with one or more attachment devices that are secured to the top, bottom, and/or side edges of the panel elements.

12. The method of claim 11, wherein said attachment device(s) for securing said panel element(s) to said fence comprises a strap in the form of a loop and the loop is secured to the panel elements by being sewn, glued, riveted, or stapled to the panel elements.

13. The method of claim 11, wherein said attachment devices comprise a strap and one end of the strap is permanently attached to the panel and the other end of the strap is releasably attached to the panel via at least one fastener selected from a group consisting of Velcro, loop and peg, snaps, buttons, buckles, and hooks and eyes.

14. The method of claim 11, wherein said panel elements comprise an inner material and one or more outer coverings.

15. The method of claim 11, wherein one or more of the panels are decorated with artwork, pictures, additional fabric and/or a mural.

16. The method of claim 11, wherein said panel elements are in a shape other than rectangular.

17. The method of claim 11, wherein said flexible planar material of said panel elements comprises at least one substance selected from a group consisting of canvas, plastic, vinyl, polyethylene, nylon, cotton, cloth, paper, fiber, polyester or metal.

18. The method of claim 11, wherein the attachment devices comprise a rope, nylon, polyester, fabric and/or an elastic material.

19. The method of claim 11, wherein one or more garment hooks and/or pockets are provided on one or more of the panels for hanging and storage of personal items.

20. The method of claim 11, wherein the attachment device is one or more hooks.