

PLAY SYSTEMS INCORPORATING A BALANCED CROSSPIECE CONCEPT

BACKGROUND

[0001] Many currently installed play systems, such as outdoor playground play systems, have a similar look and feel. This is true even when comparing play systems originating from different equipment manufacturers. For example, many manufactures have gravitated toward “post and deck” style systems, which typically incorporate patterns of round tubes extending from other round tubes, most often at a right angle relative to one another. Supplementary elements such as netting and cables are often incorporated as a method for improving style and increasing originality. But there is only so much that can be done when the underlying structure lacks creative inspiration.

[0002] This is not to say, of course, that some manufactures are not producing play systems having a more creative look and feel. There are certainly manufacturers that do so. It is unfortunately true; however, that an increase in design creativity often comes with a corresponding decrease in another consideration such as component modularity or assembly convenience. This is at least because more creative components have a tendency to be more specialized and therefore less universal and easily connectable.

[0003] There continues to be a need for play systems that balance creative aesthetic characteristics with other more functional considerations.

SUMMARY

[0004] Embodiments of play systems incorporating a balanced crosspiece concept are disclosed. In one embodiment, a series of segments are joined together so as to create the appearance of two crosspieces intersecting with one another at a point where one of the crosspieces has an appearance of having been notched out. Play elements are illustratively connected to at least some of the segments.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] FIG. 1 is a perspective view of a play system that incorporates a balanced crosspiece concept.

[0006] FIG. 2 is a top view of the play system.

- [0007] FIG. 3 is a side view of the play system.
- [0008] FIG. 4 is an end view of the play system.
- [0009] FIG. 5 is a transparent assembly view of a portion of the play system.
- [0010] FIG. 6 is a perspective and partially transparent view of a portion of the play system.
- [0011] FIG. 7 is a perspective view of attachment cartridges utilized to connect segments.
- [0012] FIGS. 8-10 are perspective views of a crossing segment.

DETAILED DESCRIPTION

[0013] FIG. 1 is a perspective view of a play system 100 that incorporates a balanced crosspiece concept. System 100 includes a plurality of anchor footings 102, which are illustratively but not necessarily hardened concrete footings. Those skilled in the art will appreciate that other types of footings serving a similar function could just as easily be substituted.

[0014] It should be noted that only a representative few of footings 102 have been labeled in FIG. 1. In the present description, when a representative few are labeled, it is to be assumed that all elements having a same or substantially similar appearance carry the same label. Leaving out labels is done only for the purpose of improving clarity by decluttering the figure.

[0015] Above each anchor footing 102 is an anchor support 104. Only a representative few anchor supports 104 have actually been labeled in FIG. 1. An elongated component 103, an illustrative few having been specifically labeled, then passes through each anchor support 104 into an anchor footing 102. The elongated component 103 is in some cases a cable but in other cases is a post. Those skilled in the art will appreciate that other types of elongated components 103, such as but not limited to a hybrid post/cable system, may be substituted. The precise nature of the component 103 is not critical.

[0016] Those skilled in the art will appreciate that each combination of anchor footing 102, anchor support 104, and elongated component 103 is a point at which a portion of the play system 100 is anchored to the ground and structurally supported. The footing 102 is illustratively buried underground, the anchor support 104

illustratively engages the ground at or near the surface, and the elongated component 103 illustratively passes through the anchor support 102 into the footing 102. In this manner, the overall structure of play system 100 is secured to the ground and structurally supported.

[0017] Play system 100 also includes a first crosspiece 106 having a first end 108 and a second end 110. Also included is a second crosspiece 112 having a first end 114 and a second end 116. Also included is a third crosspiece 118 having a first end 120 and a second end 122. Also included is a fourth crosspiece 124 having a first end 126 and a second end 128. Also included is a fifth crosspiece 130 having a first end 132 and a second end 134. Also included is a sixth crosspiece 136 having a first end 138 and a second end 140. Also included is a seventh crosspiece 142 having a first end 144 and a second end 146. Also included is an eighth crosspiece 148 having a first end 150 and a second end 152.

[0018] The ends 134, 140, 146 and 152 are illustratively the bottom ends of crosspieces 130, 136, 142 and 148, respectively. These crosspieces 130, 136, 142 and 148 operate in a manner similar to vertical posts, though their positioning is illustratively (though not necessarily) at a slight angled orientation relative to a flat reference plane that is in line (or substantially close to being so) a ground surface in the area where play system 100 has been installed (e.g., a flat or substantially flat reference plane passing through most or all of the anchor supports 104 shown in FIG. 1). In one contemplated scenario, any or all crosspieces, especially those that are directly part of the engagement with a ground surface, are positioned at an angled orientation relative to the mentioned flat or substantially flat reference plane at least because doing so enables a broader distribution of a load placed thereon.

[0019] In one embodiment, the crosspieces 130, 136, 142 and 148 each extend through their respective anchor support 104 and all the way into their associated anchor footing 102. This need not necessarily be the case. For example, in another embodiment, each of the ends 134, 140, 146 and 152 illustratively extends into an outer sleeve, the outer sleeve extending through the anchor supports 104 and/or into anchor footings 102. One skilled in the art will appreciate that where the crosspieces 130, 136, 142 and 148 begin and where the outer sleeve begins, in this scenario, is a matter of

design choice. One skilled in the art will also appreciate that other anchoring configurations that transition between footing and crosspiece can be substituted.

[0020] FIG. 2 is a top view of the play system 100. The top view provides additional clarity in terms of the positional relationships between crosspieces 106, 112, 118, 124, 136, 130, 142, and 148. Furthermore, the top view makes it clear that crosspieces 106, 118, 136 and 142 are substantially similar but inverse when compared to crosspieces 112, 124, 130 and 148. Thus, to avoid redundancy, rather than completely describe both sides completely, the present description will proceed with primary focus on the 112/124/130/148 crosspiece combination under the assumption that the 106/118/136/142 crosspiece combination is configured in substantially the same manner or at least in the same but manner inversed for the purpose of supporting a totally or substantially symmetrical design.

[0021] FIG. 3 is a side view of play system 100 taken from the near side of the perspective shown in FIG. 1. FIG. 3 provides additional clarity in terms of the positioning of the crosspieces 112, 124, 130, and 148 in relation to one another. The side view makes it clearer that crosspiece 112 has the appearance of crossing behind crosspiece 148 and crosspiece 124, from the perspective of FIG. 3. Crosspiece 124 has the appearance of passing in front of crosspiece 130 and crosspiece 112.

[0022] FIG. 3 also shows that each of crosspieces 112, 124, 130, and 148 are actually comprised of multiple segments attached in series to one another. Crosspiece 148 is illustratively comprised of an end segment 302, a crossing segment 304, and an end segment 306. Crosspiece 130 is illustratively comprised of an end segment 308, a crossing segment 310, and an end segment 312. Crosspiece 124 is illustratively comprised of an end segment 314, the crossing segment 310, a middle segment 316, a crossing segment 317, and an end segment 318. Crosspiece 112 is illustratively comprised of an end segment 320, the crossing segment 304, a middle segment 322, the crossing segment 317, and an end segment 324. Thus, as will become apparent, the crossing segments 304, 310, 317 are each configured to be shared by multiple of the individual crosspieces.

[0023] It is to be understood that it is not critical in terms of the particular number of segments incorporated into each of the crosspieces 112, 124, 130, and 148.

Each beam can just as easily be designed and manufactured so as to include more or fewer individual segments. The specific implementation, as will be apparent to one skilled in the art, is but one example of a workable configuration. Other similar configurations with differing numbers of segments are also contemplated.

[0024] FIG. 4 is an end view of play system 100 taken from the left side of the perspective shown in FIG. 1. Crosspiece combinations 112/124/130 and 106/118/136 have been labeled for context. The primary focus; however, will continue to be the 112, 124, 130 and 148 crosspiece combination, crosspiece 148 being obscured and therefore not labeled in FIG. 4.

[0025] The end perspective of FIG. 4 provides still more clarity in terms of the positioning of the crosspieces 112, 124 and 130 in relation to one another. The end view makes it clearer that crosspiece 112 has the appearance of actually crossing through, though not squarely through, crosspiece 124 (or vice versa). Crosspieces 112 and 124, at their apparent point of intersection are configured to support the aesthetic characteristic that one of the crosspieces has been notched out to accommodate the passing through of the other. Were both of crosspieces 112 and 124 completely solid, indeed one of them would have to be notched out to accommodate the passing through of the other. However, as will become apparent, the crossing segment 317, which was introduced in relation to FIG. 3 and contributes to both of crosspieces 112 and 124, is illustratively not solid but instead is configured only to convey an impression of being so.

[0026] Crosspieces 112 and 124 are configured so as to be slightly rotated relative to a reference plane that is substantially in line with a ground surface where play system 100 has been installed. The slight rotation of crosspieces 112 and 124, and illustratively all of the other crosspieces described herein as well, is such that none of the substantially flat sides of a crosspiece is substantially parallel (or perpendicular) with the reference plane. Of course, this is an optional configuration. Further, the positioning in relation to the reference plane assumes that play system 100 is installed in an area with a flat ground surface. A flat ground surface will be assumed only for the purpose of providing relative orientation. Those skilled in the art will appreciate that

modifications can be made to accommodate a less than perfectly flat ground surface without departing from the design concepts described herein.

[0027] The end view of FIG. 4 also makes it clearer that crosspiece 130 has the appearance of actually crossing through, though not squarely through, crosspiece 124 (or vice versa). Crosspieces 130 and 124, at their apparent point of intersection are configured to support the aesthetic characteristic that one of the crosspieces has been notched out to accommodate the passing through of the other. Were both of crosspieces 130 and 124 completely solid, indeed one of them would have to be notched out to accommodate the passing through of the other. However, as will become apparent, the crossing segment 304, which was introduced in relation to FIG. 3 and contributes to both of crosspieces 130 and 124, is illustratively not solid but instead is configured only to convey the impression of being so.

[0028] FIG. 5 is a transparent assembly view demonstrating how the various segments of crosspiece combinations 112/124/130 and 106/118/136 are assembled. As was essentially described in relation to FIG. 3, each individual crosspiece is actually a series of interconnected segments. As was noted relation to FIG. 3, for example, crosspiece 124 is illustratively comprised of end segment 314, crossing segment 310, middle segment 316, crossing segment 317, and an end segment 318. The transparent assembly view of FIG. 5 demonstrates how crossing segment 317 and end segment 318 are put together, which is illustratively consistent with how other segments in the crosspiece combinations are put together.

[0029] As is shown in FIG. 5, end segment 318 and the illustrated portion of crossing segment 317 are illustratively hollow. An end cap 504 is utilized to closed the end of end segment 318. The other crosspieces in play system 100 that have openings are illustratively sealed with an end cap in a similar manner. One or more rivets are illustratively utilized to fix the end caps in place. One or more holes are illustratively formed (e.g., during manufacturing) to accommodate the rivet-based attachment of a cap to a segment.

[0030] A seam exists between the individual segments of each of the crosspiece combinations 112/124/130 and 106/118/136. This is reflected in FIG. 5 where a seam 502 is formed between crossing segment 317 and end segment 318. Seam 502 is formed

when segment 318 is brought into engagement with segment 317. Seam 502, which is illustratively though not necessarily also true for any or all seams between crosspiece segments in play system 100, is an angled seam. This is due to the fact that each of segments 318 and 317 are formed with angled edge at their point of engagement.

[0031] A first attachment cartridge 508 and a second attachment cartridge 510 are provided to facilitate a fixing of end segment 318 to crossing segment 317. Cartridges 508 and 510 are positioned partially inside of end segment 318 and partially inside of crossing segment 317. This is apparent in FIG. 5 due to the transparent nature of the drawing.

[0032] A representative few of a plurality of connectors 512 are shown and labeled in FIG. 5. These connectors 512 are utilized to secure cartridge 508 to end segment 318 on one side of seam 502 and to crossing segment 317 on the other side. Similarly, another plurality of connectors 512 are utilized to secure cartridge 510 to end segment 318 on one side of seam 502 and to crossing segment 317 on the other side. Of course, openings are included (e.g., added during manufacturing) in the segments to facilitate attachment utilizing the connectors 512. Those skilled in art will appreciate the precise nature of connectors 512 may vary from one implementation to the next. In one embodiment, the connectors 512 are a simple nut-and-bolt combination with the head of the bolt being located on the exterior of the segments and the bolt being hidden on the inside. A washer and/or bolt head cap can also optionally be included. As is reflected in FIG. 5, each pair of two connectors 512 is illustratively staggered so as to not be in line with another pair of two connectors 512. The angled nature of seam 502 facilitates this arrangement. This configuration makes assembly particularly convenient.

[0033] Though assembly can be done in any order, it is particularly convenient to secure a first end of attachment cartridge 508 (using two connectors 512) to crossing segment 317 before end segment 318 is brought into engagement at seam 502. Next, a first end of attachment cartridge 510 is illustratively secured (using two connectors 512) to crossing segment 317. The angled nature of seam 502, as well as the staggered instead of stacked connection scheme, makes access to the interior of crossing segment 317 particularly convenient when securing the first ends of attachment cartridges 508

and 510. Next, the end segment 318 is slid over attachment cartridges 508 and 510 before end cap 504 is secured in place. By reaching through the open end of end segment 318 (or, alternatively another opening formed in the segment that provides access), connectors 512 are then utilized to attach the other ends of attachment cartridges 508 and 510 to end segment 318. Finally, cap 504 is secured in place.

[0034] FIG. 6 is a perspective and partially transparent view of a portion of play system 100. The view is essentially a perspective close-up of the location where crosspiece 124 intersects crosspiece 112 at crossing segment 317. The view also shows, on the other side, the intersection where crosspiece 118 intersects with crosspiece 106. The detail on this other side of play system 100 is provided at least to emphasize that both sides are illustratively configured in a similar manner.

[0035] The view of FIG. 6 is transparent in that it reveals that end segment 324, middle segment 322, end segment 324, and middle segment 316 are each attached to crossing segment 317 in a manner substantially similar to the 318/317 segment connection described in relation to FIG. 5. In particular, a combination of attachment cartridges (i.e., same or similar to attachment cartridges 508/510) supported with connectors (i.e., same or similar to connectors 512) are deployed. An angled seam (i.e., same or similar to seam 502) is also included at each connection point. One skilled in the art will appreciate that the connections at crossing segments 310 and 304 (FIG. 3) are illustratively configured the same or substantially similar to the connections at crossing segment 317, as described in relation to FIGS. 5 and 6.

[0036] FIG. 7 is a perspective view of attachment cartridges 708 and 710, which are exemplary of the mechanisms described above for connecting segments of crosspieces. Attachment cartridge 708 is illustratively separate from attachment cartridge 710. As shown, and has been described herein, the cartridges are slid out of perfect alignment from one another in order to support attachment of two segments on both sides of an angled seam formed between two segments of crosspieces. It should be noted though that any or all attachment cartridges described herein could just as easily be configured so as to be in alignment with one another rather than being offset. The angled seam makes sliding out of alignment an appealing alternative for a variety of reasons including access and aesthetics. However, particularly in a scenario in which

the seam is flat rather than angled, attachment cartridges could just as easily be positioned in line with one another – and therefore supporting a more in line attachment scheme. It is also contemplated that opposing attachment cartridges could have a different size or shape compared to one another. They need not necessarily be identical.

[0037] Attachment cartridges 708 and 710 are each shown with connectors 512 secured thereto (a representative few have been labeled). A connection hole is illustratively formed in each corner of a surface of each attachment cartridge to accommodate a bolt portion of the connector passing therethrough. A head portion of the bolt is illustratively sized to engage a surface of the connector (and/or a surface of a segment of a crosspiece) so as to facilitate a securing of pieces together, as one skilled in the art will appreciate. A nut is threaded onto the bolt in order to complete the securing. An optional cap is secured over the head of each head of bolt 702 in order to provide an appeal aesthetic, instead of a raw bolt head. Other mechanisms for securing crosspiece segments together utilizing attachment cartridges should be considered contemplated as simple alternative design choices. The illustrated nut, bolt, cap combination is illustrative only. In another embodiment, the bolt is configured to attach/secure to the attachment cartridge even without a bolt being utilized to reinforce the two pieces together.

[0038] FIG. 8 is a first perspective view of crossing segment 317. FIG. 9 is a second perspective view of crossing segment 317, rotated so as to enable a view along a sight line 802 shown in FIG. 8. FIG. 10 is a second perspective view of crossing segment 317, this time rotated so as to enable a view along a sight line 804 shown in FIG. 8. The purpose of FIGS. 8 and 9 are intended to show what it looks like through an interior of crossing segment 317.

[0039] A first feature to notice in the depictions of crossing segment 317 in FIGS. 8-10 are a plurality of attachment holes 806, a representative view of which have been labeled. These are illustratively the points at which connectors are utilized to engage the crossing segment 317 to other segments utilizing, as has been described, a plurality of attachment cartridges. Notably, the attachment holes 806 are configured at each point of attachment such that a first pair of attachment holes 806 is staggered instead of being in line with another pair of attachment holes 806.

[0040] The view in FIG. 9 of crossing segment 317 (which is taken from the perspective of arrow 802 in FIG. 8) reveals a substantially hollow interior. It isn't critical that crossing segment 317 be manufactured as a single piece. It could just as easily be two or more interconnected components. In the embodiment shown in the FIGS. 8-10, for example, a first component 904 is illustratively nested together with a second component 906.

[0041] Play system 100 includes crossing segments other than crossing segment 317 (e.g., crossing segments 304 and 310). When the manufacturing approach for a crossing segment calls for connecting and or nesting multiple individual components, it becomes critical that the correct components be paired together for each crossing segment. This is true at least because not every crossing segment is or need be identical such that their components are interchangeable.

[0042] Thus, components of a crossing segment are illustratively configured to include indexing features to help ensure that the correct components of each crossing segment are paired together. With reference to FIG. 9, a pair of tabs 902 are illustratively utilized to facilitate a proper pairing of components 904 and 906. Component 906 is illustratively notched out to facilitate an intrusion of the tabs 902 included in component 904. One or both of tabs 902 also include an imprinted number (e.g., "4") to further help the accurate pairing of components.

[0043] The view in FIG. 10 of crossing segment 317 (which is taken from the perspective of arrow 804 in FIG. 8) reveals a substantially hollow interior. A tab 1002 is illustratively utilized to facilitate the connection of components 904 and 906. As is reflected in FIG. 10, component 904 is illustratively configured to facilitate the joining of the two components together. As can be seen in FIG. 10 another imprinted number (e.g., "4") is configured to help the accurate pairing of the individual components. In one example, both components 904 and 906 include imprinted numbers that are the same for encouraging an accurate pairing.

[0044] The described tabs 902 are illustratively sized specifically to facilitate a proper connection at the intersection of associated components. For example, component 904 is illustratively notched out so as to accept only a tab with a corrected orientation. This illustratively prevents component 904 from being nested into

component 906 “backwards,” and prevents some other component from a different crossing segment from being joined to component 906 so as to create an “invalid” connection. Essentially, there is a “keyed” or “indexed” relationship between the tabs of component 906 and the notch formed in component 904. The same is illustratively true for the other tab/notch pairings of the other components of crossing members incorporated into play system 100 – with each crossing segment having a uniquely keyed or indexed pair of segments.

[0045] Thus, the other crossing segments in play system 100 are illustratively configured similarly when compared to crossing segment 317. This is not to say that the angles and orientation at which the two included segments need be identical when compared to crossing segment 317. It is contemplated for there to be a variety of different crossing segments incorporating a variety of different angles and orientations, etc. Thus, the added convenience of the keyed or indexed relationship between crossing segment components.

[0046] Before proceeding further into the present description, it is worth noting that the terms “crossing” as used herein is not necessarily limited to a scenario in which one segment has an overall look and feel consistent with one segment passing through at least a part of another segment. Those skilled in the art will appreciate that one segment could just as easily be configured to cross behind without seeming to go through. Further, it is also contemplated for one segment to pass squarely through another segment instead of being rotated at an angle. The examples shown herein are not to be considered limiting.

[0047] Play system 100 is illustratively modular in that any number of end, middle and crossing segments can be manufactured and combined in myriad different combinations to produce structures with varying overall look and feel. Further, a wide variety of different play elements can be incorporated. The precise positioning of crosspieces and related crosspiece segments shown and described herein is also illustrative only. A specific configuration is provided as an example of the overall concept and is not intended to limit the scope of the present invention in any way. Those skilled in the art will appreciate that the configuration can easily be otherwise configured without departing from the scope of the present invention.

[0048] It is also worth mentioning that a beneficial feature of system 100 is that the system can be expanded in phases by starting with one or more assemblies and then adding additional assemblies after an initial system has been formed. Play elements can be incorporated into the initial system and/or added during any subsequent phase of expansion of the system.

[0049] In one embodiment, not by limitation, the crosspieces of play system 100 are manufactured from galvanized steel. Those skilled in the art will appreciate that other materials can be utilized without departing from the scope of the present invention. In one embodiment, not by limitation, the dimensions of the segments of the crosspieces of play system 100 are generally x by x (i.e., square), with a wall thickness of approximately 0.120 inches. Any cut ends are illustratively sprayed with a corrosion resistant coating and the exterior surfaces are illustratively provided with some sort of a finishing coating, such as a powder coat finishing. It is also to be understood that the scope of the embodiments disclosed herein is not limited to segments having a square, rectangular or any other specific profile, for example when viewing the segment from its end. Segments could just as easily be circular, oval-shaped, star-shaped, or any other shape. Neither must the profile be uniform from one end of a segment to its other end. There may just as easily be transitions from one profile to another.

[0050] It should be noted that dimensions provided herein (if any) are intended to be illustrative only. Specific dimensions are only provided as an example of scale and are not intended to limit the scope of the present invention in any way. Those skilled in the art will appreciate that the dimensions can easily be adjusted without departing from the scope of the present invention.

[0051] Those skilled in the art will understand that many different types of play elements can be incorporated into system 100, despite the fact that FIG. 1 shows a bridge structure. The scope of the present invention is not limited to any one element or any combination of elements. Other elements that can be integrated into system 100 include, but are not limited to a slide, crossover bars, a rope climber, a climbing net, a swing, climbing rings, a pipe climber, or a pivoting walk across.

[0052] In addition to play elements attached to play system 100, additional standalone play elements can be included in the environment. These “unattached” play elements contribute to creating a continuous and innovative play system 100.

WHAT IS CLAIMED IS:

1. A playground structure, comprising:
a first cross piece that includes a first segment connected to a crossing segment so as to be in line with a first end segment that is also attached to the crossing segment;
a second cross piece that includes a second segment connected to the crossing segment so as to be in line with a second end segment that is also attached to the crossing segment;
wherein the crossing segment is configured such that the first cross piece appears to pass through a notched-out portion of the second cross piece; and
at least one play element attached to at least one of the first and second cross pieces, the play element being configured to be climbed upon by a human.
2. The playground structure of claim 1, wherein the crossing segment is configured such that the first cross piece appears to pass through but not squarely through the second cross piece.
3. The playground structure of claim 1, wherein the first cross piece has a square profile when viewed from one of its ends, and wherein the crossing segment is configured such that some but not completely all of the square profile appears to pass through the second cross piece.
4. The playground structure of claim 1, wherein the first cross piece has a square profile when viewed from one of its ends, and wherein the crossing segment is configured such that some but not completely all of the square profile appears to pass through the second cross piece, and wherein the square profile appears to pass through the second cross piece such that, where the square profile passes through, the square profile is rotated relative to a reference plane that is substantially in line with a ground surface where the playground structure has been installed.
5. The playground structure of claim 1, wherein the first cross piece has a circular profile when viewed from one of its ends, and wherein the crossing segment

is configured such that some but not completely all of the circular profile appears to pass through the second cross piece.

6. The playground structure of claim 1, wherein the first and second segments are at least substantially hollow.

7. The playground structure of claim 1, wherein the crossing segment is at least substantially hollow.

8. The playground structure of claim 1, further comprising a plurality of anchor footings that directly or indirectly support the first and second cross pieces.

9. The playground structure of claim 1, further comprising an attachment mechanism positioned partially inside of each of, as well as secured to each of, the first segment and the crossing segment.

10. The playground structure of claim 1, wherein the crossing segment comprises a first crossing segment piece that is configured to nest together with a second crossing segment piece.

11. The playground structure of claim 10, wherein an indicator is incorporated into the first crossing segment piece to increase the likelihood that it will be properly paired with the second crossing segment piece and not with an incorrect crossing segment piece.

12. A method of assembling a playground structure, comprising incorporating a crossing segment as a portion of two cross pieces such that one of the two cross pieces assumes the appearance of being a solid cross pieces passing through a notched-out portion of the other of the two crosspieces, this despite the fact that the two cross pieces are substantially hollow.

13. The method of claim 12, wherein incorporating a crossing segment comprises connecting an end of each of the two crosspieces to the crossing segment.

14. The method of claim 13, wherein connecting a first one of the ends of the two crosspieces to the crossing segment further comprises securing an attachment mechanism that crosses between and joins the first one of the ends to the crossing segment.

15. The method of claim 12, wherein incorporating a crossing segment as a portion of two cross pieces such that one of the two cross pieces assumes the

appearance of being a solid cross pieces passing through but not squarely through a notched-out portion of the other of the two crosspieces.

16. The method of claim 12, wherein at least one of the two cross pieces has a square or rectangular profile when viewed from its end.

17. The method of claim 12, wherein at least one of the two cross pieces has a square or rectangular profile when viewed from its end.

18. A crossing segment for incorporation into a playground structure, the crossing segment comprising an at least substantially hollow first crossing segment component nested into an at least substantially hollow second crossing segment component, the first and second at least substantially hollow crossing segment components being nested so as to present the illusion of a first solid crosspiece passing through a notched-out portion of a second solid crosspiece.

19. The crossing segment of claim 18, wherein an indexing component is incorporated into at least one of the two at least substantially hollow crossing segment components so as to promote a pairing with the other of the at least substantially hollowing crossing segment components instead of a non-compatible crossing segment component.

20. The crossing segment of claim 18, wherein the first and second at least substantially hollow crossing segment components is nested so as to present the illusion of a first solid crosspiece passing through but not squarely passing through a notched-out portion of a second solid crosspiece.