

first and second retainer walls 40, 42 are non-linear along at least a portion of their respective lengths, thereby forming a helical slot along at least a portion of its length. In one embodiment, the first and second retainer walls 40, 42 are non-linear along an entirety of their respective lengths, thereby forming a helical slot along an entirety of the slot 38.

The cable retainer 26 is a single, integrally formed component in contrast to cable retainers having multi-piece designs, such as split collar designs, for example. The unitary cable retainer 26 allows an installation operator to easily grip the cable retainer 26 with one hand while inserting the cable 18 through the helical slot 38 by bending the cable to align with the helical orientation of the slot 38. The unitary cable retainer 26 may even facilitate one-handed installation of the cable 18 through the slot. Upon insertion through the slot 38, the cable retainer is inserted into the inner cavity 14 of the cable end housing 12. Insertion is made until the retainer outer surface 36 of the cable retainer 26 contacts a ring inner surface 44 of the retainer ring 20. The retainer outer surface 36 and the ring inner surface 44 have substantially corresponding geometries, such that the cable retainer 26 seats within a portion of the retainer ring 20 upon full insertion of the cable retainer 26 into the cable end housing 12. Typically, the cable retainer 26 and the retainer ring 20 are in direct contact. The cable 18 is then pulled to bring the cable end fitting 16 into contact with the retainer inner surface 34 of the cable retainer 26. Such a final assembled condition is shown in figures 2 and 5.

Advantageously, the helical slotted cable retainer 26 described herein has self-retaining capability to the cable end fitting 16, as shown in figure 6. Additionally, installation and removal efforts are substantially simplified in comparison to a cable retainer having multiple components, such as a split collar design. In addition to enhancing the assembly process, a more reliable assembly is achieved with the embodiments of the cable retainer 26 described herein. Specifically, the cable fitting cannot be inadvertently removed from the cable retainer 26, even during a compressive force being applied to the cable 18. This is due to the single component that forms the cable retainer 26. In contrast, a split retainer may loosen during the imposition of a compressive force on the cable 18, thereby extracting the cable 18 and potentially leading to safety hazards.

Mobile zip line amusement ride

*Pat. 9,555,335 U.S. class A63G 21/22 Int. class A63G 21/22
Inventor: Jeffrey Dean Wilson, Newcastle, CA., Christopher Ryan Resnicke, Lincoln, CA.*

Assignee: High Velocity Designs, LLC., Newcastle, CA.

The present invention relates to a zip-line ride system. The zip-line ride system may consist of a tower and an anchor connected by a cable. The anchor may be fixed or temporary, allowing for a zip-line ride that may be portable. The zip-line ride system may also allow for an adjustment to the height, length, tension, or any combination of all three, of the cable.

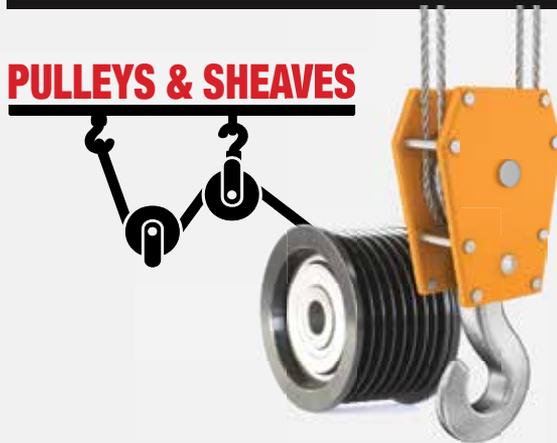
Referring to figure 7, one embodiment of a zip line system 10 is shown with a tower 12 connected to a trailer 14 with the tower 12 in an upright position. A temporary anchor 16 is also shown. A cable 18 is shown connected between the tower 12 and the temporary anchor 16. A zip line system 10 may include four sub-assemblies, a tower 12, a trailer 14, a temporary anchor 16, and a tension measuring device 100.

Referring to figures 8 and 9, one embodiment of a tower 12 is depicted showing the tower 12 from two separate views that may be considered the front and back of the tower 12. The

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