A HITCHING ASSEMBLY FOR A RECREATIONAL ACTIVITY

Technical Field

[0001] The present disclosure generally relates to a hitching assembly for a recreational activity. More particularly, it relates to a hitching assembly configured for mounting on a light transport vehicle and for recreational use, for example, towing a rider on wheeled devices such as roller skates, roller blades, cruisers, surfboards, skateboards and longboards.

Background

[0002] The following discussion of the background to the invention is intended to facilitate an understanding of the present invention. However, it should be appreciated that the discussion is not an acknowledgment or admission that any of the material referred to was published, known or part of the common general knowledge in any jurisdiction as at the priority date of the application.

[0003] A rider can ride recreationally on various wheeled devices. For example, a longboard is a form of skateboard akin to a surfboard with wheels. Longboards are commonly used for cruising, or alternatively may be used for downhill slopes. Cruising and surfing on a longboard is joyous especially while travelling down slope. However it is difficult for beginners especially for one that is not athletic as it requires strength and balancing. It is not as popular as cycling which is easier when travelling long distances with up and down slopes.

[0004] In order for a bicycle to tow a rider on a longboard, a long rope can be tied to the bicycle with the longboard rider holding the other end. However, when the cyclist stops, the longboard rider has to hold on to the rope or drop it on the ground. For the longboard

rider to continue, he has to pick up the rope that is laying on the ground. When the cyclist slows down, the rope between them goes slack and lies on the ground posing safety issues. When the cyclist accelerates, the rope gets taut and create jerks between them making the ride rough and undesirable.

[0005] There appears to be no attempt to address this problem. As such, the present invention attempts to overcome at least in part some of the aforementioned disadvantages and to provide for an improved approach for addressing the foregoing challenge.

Brief Description of the Drawings

[0006] In the drawings, like reference characters generally refer to the same parts throughout the different views. The drawings are not necessarily to scale, emphasis instead generally being placed upon illustrating the principles of the invention. The dimensions of the various features or elements may be arbitrarily expanded or reduced for clarity. In the following description, various embodiments of the invention are described with reference to the following drawings, in which:

[0007] FIG. 1 shows a perspective view of a hitching assembly configured for mounting on a light transport vehicle in accordance with embodiments of the present invention;

[0008] FIG. 2 shows a perspective view of a hitching assembly mounted on a light transport vehicle towing a rider on a wheeled device in accordance with embodiments of the present invention;

[0009] FIG. 3 shows a perspective exploded view of the hitching assembly in accordance with embodiments of the present invention;

[0010] FIG. 4 shows a perspective exploded view of another hitching assembly in accordance with embodiments of the present invention;

[0011] FIG. 5 shows a perspective view of the interior of the housing in accordance with embodiments of the present invention.

[0012] FIG. 6 shows a perspective view of another embodiment of a hitching assembly in accordance with the embodiments of the present invention;

[0013] FIGS. 7a-7d illustrates various views of the housing and a locking pin and its components thereof in accordance with the embodiments of the present invention;

[0014] FIGS. 8a-8d illustrate various views of the retractable mechanism and its components thereof in accordance with the embodiments of the present invention;

[0015] FIG. 9a shows a side view of the hitching assembly mounted to a seat rail of a light transport vehicle when in use in accordance with embodiments of the present invention;

[0016] FIG. 9b shows a top perspective view of the hitching assembly mounted to a seat rail of a light transport vehicle when in use in accordance with embodiments of the present invention;

[0017] FIG. 10 shows a perspective view of a hitching assembly mounted on a light transport vehicle in accordance with embodiments of the present invention;

[0018] FIG.11a shows a perspective view of another embodiment of a hitching assembly mounted on a light transport vehicle in accordance with the embodiments of the present invention;

[0019] FIG. 11b shows a perspective view of an attachment mechanism in accordance with the embodiments of the present invention; and

[0020] FIG. 12 shows a perspective view of another hitching assembly mounted on a light transport vehicle in accordance with embodiments of the present invention.

Summary of the Invention

[0021] The following presents a simplified summary of one or more aspects in order to provide a basic understanding of such aspects. This summary is not an extensive overview of all contemplated aspects, and is intended to neither identify key or critical elements of all aspects nor delineate the scope of any or all aspects. Its sole purpose is to present some concepts of one or more aspects in a simplified form as a prelude to the more detailed description that is presented later.

[0022] According to a first aspect of the present disclosure, there is provided a hitching assembly for a recreational activity comprising a housing having a first aperture for permitting passage of a cord and a locking pin configured for attachment to the housing. The hitching assembly also includes a retractable mechanism including a spool for detracting and retracting the cord from the housing through the first aperture, and a second aperture located on the central axis of the spool for the passage of the locking pin to secure the retractable mechanism to the housing, and a recoil spring cooperatively engaged with the spool and the locking pin for applying tension on the spool when the cord is detracted from the housing. The hitching assembly also includes an attachment mechanism coupled to the housing and configured for releasable connection to a rear end of a light transport vehicle and a handle configured for coupling to a desired length of the cord.

Detailed Description

[0023] Reference will now be made in detail to an exemplary embodiment of the present invention, examples of which are illustrated in the accompanying drawings. While the invention will be described in conjunction with the embodiment, it will be understood that they are not intended to limit the invention to these embodiments. On the contrary, the invention is intended to cover alternatives, modifications, and equivalents, which may be included within the spirit and scope of the invention as defined by the appended description. Furthermore, in the following detailed description of embodiments of the present invention, numerous specific details are set forth in order to provide a thorough understanding of the present invention. However, it will be recognized by one of ordinary skill in the art that the present invention may be practiced without these specific details. In other instances, well-known methods, procedures, components, and circuits have not been described in detail as not to unnecessarily obscure aspects of the embodiments of the present invention.

[0024] In the specification the term “comprising” shall be understood to have a broad meaning similar to the term “including” and will be understood to imply the inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps. This definition also applies to variations on the term “comprising” such as “comprise” and “comprises”.

[0025] Certain terminology used in the description is for convenience in reference only and shall not be limiting. For example, up, down, front, back, side, right, and left refer to the disclosed subject matter as orientated in the view being referred to. The words, “inwardly” and “outwardly” refer to directions toward and away from, respectively, the geometric center of the aspect being described and designated parts thereof. The terminology will include the words specifically mentioned, derivatives thereof, and words of similar meaning. Like references numbers denote like features, components, or elements throughout the various embodiments.

[0026] To achieve the stated features, advantages and objects, the present invention is directed to a hitching assembly for a recreational activity, for example, towing a rider on a wheeled device. This provides more fun and enjoyment in riding a wheeled device such as a longboard. It also provides a rider with an easier and alternative way to learn how to ride a wheeled device.

[0027] Various embodiments provide for a hitching assembly configured for mounting on a light transport vehicle. Light transport vehicles may include bicycles, two-wheeled transport vehicles including scooters and electric scooters, personal mobility devices, motorcycles, 3-wheeled vehicles or 4-wheeled vehicles. A person or persons utilizing a light transport vehicle for the purposes of transportation from point A to point B will hereinafter be defined as a user for the purposes of illustration.

[0028] FIG. 1 illustrates a perspective view of a hitching assembly 20 that is releasably connected to a light transport vehicle, for example, a bicycle. In a resting position, the hitching assembly 20 is configured to be releasably connected to a rear end of the light transport vehicle 40 without impeding the movement of the user while riding the light transport vehicle. In various embodiments, the hitching assembly 20 is releasably connectable to a rear of the light transport vehicle. In some embodiments, the hitching assembly is releasably connectable to a seat rail. The hitching assembly is designed with ergonomic features that cater to both users and riders on wheeled devices that are being towed by the light transport vehicle. It is also designed to provide an effective and convenient way for riders on wheeled devices to hitch free rides from passing users on light transport vehicles thereby making the hitching assembly a useful one.

[0029] In various embodiments, a wheeled device is a recreational device with wheels capable of transporting a rider from point A to point B. Some examples of such wheeled devices are roller skates or roller blades, cruisers, skateboards, surf skates and longboards.

[0030] FIG. 2 shows a perspective view of a hitching assembly 20 releasably connected to a light transport vehicle 40, for example a bicycle, and towing a rider 12 on a wheeled device 11 in accordance with embodiments of the present invention. In various embodiments, the hitching assembly 20 has a housing for storing a retractable mechanism (not shown). One end of the cord 24 is attached to the retractable mechanism inside the housing. The cord 24 extends from the retractable mechanism and through an aperture in the housing. The retractable mechanism is configured to retract the cord 24 through the aperture after the cord 24 has been pulled taut by the rider 12. This provides the advantage of preventing the cord from being tangled when in a resting position. When in use, the retracting cord ensures that the rider does not get tangled with the cord 24 when the light transport vehicle is travelling at varying speeds. The cord 24 can be made from any material and can take any suitable form, including but not limited to, a string, a chain, or a plastic material.

[0031] FIG. 3 shows a perspective exploded view of a hitching assembly 20 in accordance with embodiments of the present invention. The hitching assembly 20 comprises a housing 28 configured for housing a retractable mechanism (not shown), a cord 24 attached to the retractable mechanism, an attachment mechanism 21 for connecting the housing 28 to a structure of a light transport vehicle and a handle 29 coupled to one end of the cord 24. The attachment mechanism 21 is configured to releasably attach the housing 28 to the structure of the light transport vehicle. In some embodiments, the attachment mechanism 21 includes a connector 21a coupled to an attachment 21b that is in turn connected to a portion of the housing 28. In some embodiments, a pair of connectors 21a each of which is coupled to an attachment 21b is used. In some embodiments, the attachment mechanism 21 includes a connector 21a integrated with an attachment 21b as a single unitary piece. In some embodiments, the attachment 21b is a string or an elastic band. In some embodiments, the attachment mechanism 21 can include a single connector 21a coupled to a single attachment 21b.The attachment mechanism 21 is configured for securing to a flange 25 on

the exterior of the housing 28. The connectors 21a include a quick-release connector such as a carabiner for easy detachment of the hitching assembly 20 from the structure of the light transport vehicle. The attachment mechanism 21 provides a means for connecting the hitching assembly 20 to the light transport vehicle at an easily accessible position. The attachment mechanism 21 can either connect the hitching assembly 20 temporarily or permanently to the structure of the light transport vehicle by providing a quick-connect-release mechanism.

[0032] In various embodiments, the housing 28 is generally cylindrical. However, it is envisaged that the housing 28 can be shaped and dimensioned accordingly to suit the contours of the structure of the light transport vehicle or to enhance the aesthetics. For example, the housing 28 is rectangular with open sides (as shown in FIG. 10a). In one embodiment, the housing 28 includes a pair of flanges 25 each attached to a side of the exterior of the housing 28. Each flange 25 includes an aperture configured for receiving the attachment mechanism 21 or a portion thereof for secure attachment to the housing 28. For example, the aperture of the flange 25 is configured for receiving the attachment 21b so that the attachment can be secured to the housing 28. In another embodiment, the housing 28 includes a flange located on the periphery or circumference of the exterior of the housing 28 such that the flange protrudes from the periphery or circumference of the housing 28. The flange is configured for receiving an attachment 21b so that the attachment can be secured to the housing 28. In some embodiments, the flange includes an aperture for receiving the attachment mechanism 21 or a portion thereof for secure attachment to the housing.

[0033] In various embodiments, the housing has a retractable mechanism that has a cord attached to the retractable mechanism at one end of the cord. When in use, the cord is configured to retract through an aperture of the housing whenever the cord is released by the rider or when the cord slackens during the ride. The cord 24 includes a stopper 23 attached to an end of the cord 24 to prevent the cord 24 from retracting fully through the

aperture of the housing 28. The aperture is dimensioned to permit the passage of the cord 24 and to prevent the passage of the stopper through the aperture. The retractable mechanism includes a spool or a spindle that is rotatably mounted on a locking pin that passes through the centre of the housing. The spool is free to rotate about the axis of the locking pin. The cord is wound around the spool. A spring component, for example, a spiral torsion spring or a recoil spring, or a constant force spring, is pivotably mounted to the locking pin in the centre of the spool. In one embodiment, the housing includes two enclosures that are mounted on the locking pin to hold the housing together. The spring component is cooperatively engaged with the spool to apply tension on the spool when the cord is detracted from the spool and housing 28. One end of the spring component is anchored to the locking pin and the other end of the spring component is secured to the edge of the inner part of the spool. As the cord is detracted from the housing, the spool rotates about the pin to the point where it reaches its maximum state of detraction (or when the cord runs out). As the spool rotates to allow the cord to be detracted from the housing, the spring component applies an increasing rotary tension on the spool to cause the spring component to revert to its original uncoiled position. This causes the spool to rotate in the opposite direction (i.e. of when the cord is detracting from the housing) and causes the cord to be retracted and wound round the spool when the cord is released or slackens during the ride.

[0034] In various embodiments, the exposed length of the cord 24 is adjustable to a suitable length of cord as desired by the rider for the rider's enjoyment. This allows the rider to adjust the length of the cord for providing different levels of comfort and versatility. To adjust the length of the cord for towing, the exposed length of cord 24 is wound round the handle 29 and secured to the handle 29 by tying a hitch knot. In some embodiments, the maximum exposed length of the cord 24 is at least 3 meters to provide a safe distance between the user of the light transport vehicle and the rider so as to prevent the rider from crashing into the light transport vehicle in the event of the light transport vehicle braking suddenly. In some embodiments, the cord has an annular cross-section and has a diameter

of at least 1.0 mm. In some embodiments, the cord is a tape that is flat and has a square or a rectangular cross-section. A cord that is too thick and long tends to bulky and heavy and can cause a user of the light transport vehicle to feel unstable due to the tension in the cord when the rider is pulling at the cord at maximum tension. The cord is therefore arranged to be of a suitable weight and diameter so that the retractable mechanism can easily retract the cord fully and smoothly during towing of the rider, especially when the speed of the light transport vehicle can vary frequently. In some embodiments, the cord is made of a nylon material or a high strength polyester material. It would be appreciated that the cord may be made of any suitable material that can withstand the pressure and forces from the bicycle and the weight of the rider.

[0035] In various embodiments, the handle 29 is constructed to be lightweight so that it can be easily retracted fully to the retractable cord mechanism when a rider is being towed. The handle 29 is lightweight and configured such that the retractable mechanism can carry the weight of the handle and be easily retracted back when in use. In some embodiments, the handle is of a generally circular shape to facilitate ease of handling by the rider. In some embodiments, the handle also includes a damping mechanism to reduce the jerking forces from the varying speeds of the light transport vehicle when in use. In some embodiments, the handle includes a hollow tube made of lightweight materials such as an elastic material, rubber, plastic or aluminium.

[0036] FIG. 4 shows a perspective exploded view of another embodiment of a hitching assembly in accordance with embodiments of the present invention. All the components of the hitching assembly 20 are similar to those present in FIG. 3, with the exception of the attachment 21b used as part of the attachment mechanism 21. In some embodiments, the attachment mechanism 21 includes a damping mechanism 21b. The damping mechanism 21b provides some advantages. It reduces the jerking forces on the rider when the hitching assembly initially starts to pull the rider, and when the speed of the light transport vehicle

changes suddenly. It also reduces the stress on the hitching assembly 20 when the cord 24 is being pulled taut during towing.

[0037] FIG. 5 shows a perspective view of the interior of the housing in accordance with embodiments of the present invention. The housing 28 includes two cylindrical enclosures that form the housing 28 by engaging the enclosures members at its perimeter. An aperture 50 is formed on the housing 28 by having each cylindrical enclosure forming a half of the aperture to form the aperture 50 when the cylindrical enclosures are secured to each other. The aperture 50 allows the cord 24 to extends from the retractable mechanism that is located within the housing through the aperture in the housing. A male member 31 and a female member 39 are positioned at the central axis of the housing 28. The male member 31 includes a locking pin for allowing the retractable mechanism to be mounted on the housing 28. The female member 39 is a socket for receiving the male member 31 so as to secure the male member 31 to the housing 28. The locking pin is a tubular member that splits into two longitudinal members partway along the locking pin 31. The locking pin includes a gap between the tubular member for allowing a recoil spring to be secured on the locking pin. During the assembly process, the male member 31 is first attached to the interior of the housing 28. The retractable mechanism includes a spool or a spindle that is rotatably mounted on the male member 31. The spool is free to rotate about its central axis. A recoil spring is located within the inner diameter of the spool, wherein one end of the recoil spring, is secured to the male member 31 through the gap of the male member and the other end is secured to the spool.

[0038] FIG. 6 shows a perspective view of another embodiment of a hitching assembly for a recreational activity. The hitching assembly 20 includes a housing 28 configured for partially enclosing a retractable mechanism. The housing 28 has sides at each end that are open, and for allowing the passage of the retractable mechanism 30 during the assembly process. The housing 28 has longitudinal sides 28a that are flat and bounded by rounded edges 28b. On each longitudinal side 28a of the housing, an aperture (not shown) passes

through the longitudinal side 28a for allowing the passage of a locking pin 31 through the retractable mechanism 30. The aperture is positioned at the approximate center of the longitudinal side. The housing 28 is constructed as a unitary body and is manufactured as a single piece. The advantage of having the housing 28 constructed as a unitary body is that it provide cost savings in manufacturing. As it is a unitary body, it can also be constructed of a lightweight material to reduce the overall weight of the hitching assembly. Some examples of materials used is aluminum or plastic. Details of the retractable mechanism 30 and locking pin 31 will be explained hereinafter.

[0039] FIGS. 7a-7d illustrate views of housing and components thereof. FIG. 7a illustrates a perspective view of the housing 28 and the apertures 22 for allowing the passage of the locking pin 31 and retractable mechanism 30 therethrough. FIG. 7b illustrates the housing 28 and the locking pin 31 secured through the apertures 22 on the housing 28. FIG. 7c illustrates a top view of the locking pin 31. The locking pin 31 is a tubular member that splits into two longitudinal members partway along the locking pin 31. The locking pin includes a gap 35 between the tubular member for allowing the passage of a recoil spring, details of which will be explained hereinafter. The locking pin 31 also includes grooves 34 at each end of the locking pin. During the assembly process, the locking pin 31 is passed through the apertures 22 of the housing 28 and the grooves 34 at each end of the locking pin 31 is configured so that they are partially exposed to the exterior of the housing 28. FIG. 7d illustrates the securing components that secure the locking pin to the housing 28. By being partially exposed to the exterior of the housing, this allows C-clips 32 to be fitted on the grooves 34 so that they can secure the locking pin 31 on the housing 28. The washers 33 are configured to create a space between the housing and the retractable mechanism for it to rotate smoothly.

[0040] FIGS 8a-8d illustrate perspective views of various components of the retractable mechanism 30. FIG 8a illustrates a spool 36 and a recoil spring 37 cooperatively engaging the spool 36. The retractable mechanism 30 includes a spool 36 for a cord to be wound

around the spool 36. The spool 36 is rotatably mounted on the housing 28 via the locking pin 31. A catch 38 as shown in FIG. 8b is positioned within the inner diameter of the spool 36 . FIG. 7c illustrates the engagement of the recoil spring 37 and the catch 38 of the spool. The recoil spring 37 is cooperatively engaged with the catch 38 at one end. The recoil spring 37 is configured such that it has a curved section at one end for allowing it to be secured by the catch 38 and a linear section at its other end that is positioned at the approximate center of the aperture of the spool 36. The position of the linear section of the recoil spring 37 allows the linear section to pass through the gap of the locking pin thereby allowing the recoil spring 37 to engage the locking pin 31. The engagement of the recoil spring 37 and the locking pin 31 provides the retractable function of the cord such that tension is applied on the spool 37 when the cord is detracted from the spool and housing 28. FIG. 8d shows a cap 39 having an aperture in its center and configured such that the linear section of the recoil spring 37 is positioned at the center of the aperture of the cap 39. During the assembly process of the retractable mechanism 30, the recoil spring 37 is first secured at its curved section via the catch on the spool. The cap 39 is slotted onto the inner diameter of the spool and is configured such that the cap 39is flushed with spool 36.

[0041] The assembly process of the hitching assembly will now be explained. The components of the hitching assembly, i.e. the housing and the retractable mechanism are configured to allow for a user to assemble the hitching assembly easily and effortlessly. For example, the components of the hitching assembly can be delivered in its individual components and separately in one compact packaging. A manual can be provided to instruct the user how to assemble the hitching assembly. The first step would be to construct the retractable mechanism as explained in the previous paragraph. Once the retractable mechanism has been assembled, the retractable mechanism is inserted into the sides of the housing and positioned such that the aperture of the spool coincides with the apertures 22 of the housing 28. The cord wound around the spool is then inserted through a bottom aperture (when the hitching assembly is in its resting position) located at the bottom of the housing 28. When in use, the cord is configured to extend and retract through the bottom

aperture of the housing 28 whenever the cord is released by the rider or when the cord slackens during the ride. At the end of the exposed cord, a ring carabiner is tied to the end of the exposed cord for releasable connection to the handle. The cord 24 includes a stopper 23 attached to an end of the cord 24 to prevent the cord 24 from retracting fully through the aperture of the housing 28. The aperture is dimensioned to permit the passage of the cord 24 and to prevent the passage of the stopper through the aperture. Once the retractable mechanism is inserted into the sides of the housing and positioned such that the aperture of the spool coincides with the apertures 22 of the housing 28, the locking pin 31 is inserted through the apertures 22 of the housing and secured with the C-clips and washers.

[0042] FIG. 9a shows a perspective view of a hitching assembly mounted on a seat rail 41 (with the seat removed for illustration purposes) of a light transport vehicle and FIG. 8b shows a top perspective view of the hitching assembly mounted to a seat rail 41 of a light transport vehicle (with the seat removed for illustration purposes) when in use. In some embodiments, the handle 29 includes a damping mechanism to reduce the jerks between the rider and the user of the light transport vehicle as well as to reduce the stress on the hitching assembly 20 when the cord 24 is being pulled taut during towing. The damping mechanism is incorporated into the handle 29 by way of using an elastic band. In some embodiments, the attachment mechanism 21 and the handle 29 includes the damping mechanism to reduce the jerking stresses on the rider and the user of the light transport vehicle. In use, the hitching assembly 20 is pivotable upwards when the cord 24 is pulled taut by the handle 29, and pivotable downwards when the cord 24 is released or slackens during the ride. A cushioning pad 26 is attached at a lower end of the housing configured for engagement with the seat bar when the cord is released or slackens. The quick-connect connectors 21a also allows the hitching assembly 20 to swivel left and right when the longboard rider sway left and right from the light transport vehicle during towing.

[0043] FIG. 10 shows a perspective view of a hitching assembly releasably connected on a seat rail 41 when in a resting position. The hitching assembly 20 comprises a housing 28

configured for housing a retractable mechanism (not shown), a cord 24 attached to the retractable mechanism, an attachment mechanism 21 for connecting the housing 28 to a seat rail of a light transport vehicle. A handle 29 can be coupled to one end of the cord 24. The attachment mechanism 21 is configured to releasably attach the housing 28 to the structure of the light transport vehicle. The attachment mechanism 21 includes a connector 21a coupled to a flange 25 projecting from the periphery of the exterior of the housing 28. In some embodiments, the attachment mechanism 21 includes a damping mechanism (not shown) connected to the connector 21a that is in turn connected to the flange 25. In some embodiments, the attachment mechanism 21 includes a connector 21a integrated with the damping mechanism 21b as a single unitary piece. In some embodiments, the attachment 21b is a string or an elastic band. The connector 21a include a quick-release connector such as a carabiner for easy detachment of the hitching assembly 20 from the structure of the light transport vehicle. The attachment mechanism 21 provides a means for connecting the hitching assembly 20 to the light transport vehicle at an easily accessible position. The attachment mechanism 21 can either connect the hitching assembly 20 temporarily or permanently to the structure of the light transport vehicle by providing a quick-connect-release mechanism. At least one cushioning pad 26 is attached on the periphery of the housing configured for engagement with the seat bar when the cord is released or slackens. Another cushioning pad 26 can be attached on the periphery at an opposed side of the other cushioning pad. The connector 21a also allows the hitching assembly 20 to swivel left and right when the longboard rider sway left and right from the light transport vehicle during towing.

[0044] FIG. 11a illustrates a perspective view of another embodiment of the hitching assembly releasably connected on the seat rail 41 (shown without the seat for illustration purposes) when in a resting position. FIG. 11b illustrates a perspective view of an attachment mechanism coupled to an exterior of the housing 28. The attachment mechanism is configured for releasable connection with the light transport vehicle. The attachment mechanism includes a belt with openings at each end. A ring is attached to each

opening of the belt. The ring is preferably easily releasable from the opening so that it will also provide a releasable connection with the light transport vehicle. For example, a ring-type carabiner can be used for such a purpose. When in use, the attachment mechanism is threaded through the internal portion of the top or bottom end of the housing (or above or bottom of the retractable mechanism) through the open sides of the housing. This allows the attachment mechanism to be easily removed when needed, or to be easily attached to the light transport vehicle.

[0045] FIG. 12 shows a perspective view of a hitching assembly releasably connected on a seat rail 41 (without the seat for illustration purposes) when in a resting position. A cushioning pad 26 is attached at a portion of the housing 28 arranged for engagement with the seat bar 42 of the light transport vehicle when the hitching assembly is in a resting position. This reduces the impact between the hitching assembly 20 and the seat bar 42, and prevents the housing from being damaged and the seat bar from being scratched. When the light transport vehicle is on the move, the cushioning pad 26 also provides a noise dampening effect from the hitching assembly knocking against the seat bar.

[0046] The hitching assembly provides and increases fun and enjoyment in longboarding. It is also a good tool for learning how to longboard. With the hitching assembly, it enhances the learning experience of a rider by helping the rider learn with both feet on the longboard and to overcome the initial wobbly starts and lack of balance on a longboard, as using one foot to paddle and balancing with just one foot is difficult for learners.

[0047] While the invention has been particularly shown and described with reference to specific embodiments, it should be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention as defined by the appended claims. The scope of the invention is thus indicated by the appended claims and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced.

What is claimed is:

1. A hitching assembly for a recreational activity comprising:

a housing having a first aperture for permitting passage of a cord; a locking pin configured for attachment to the housing;

a retractable mechanism including a spool for detracting and retracting the cord from the housing through the first aperture, and a second aperture located on the central axis of the spool for the passage of the locking pin to secure the retractable mechanism to the housing;

a recoil spring cooperatively engaged with the spool and the locking pin for applying tension on the spool when the cord is detracted from the housing;

an attachment mechanism coupled to the housing and configured for releasable connection to a rear end of a light transport vehicle; and

a handle configured for coupling to a desired length of the cord.

2. The hitching assembly according to claim 1, wherein the spool includes a catch located on an inner diameter of the spool, wherein the catch is configured for cooperative engagement with the recoil spring.

3. The hitching assembly according to claim 2, wherein the recoil spring includes a curved section at one end for coupling with the catch and a linear section at an opposed end arranged for coupling with the locking pin.

4. The hitching assembly according to claim 1, wherein the locking pin includes a longitudinal tubular member, wherein a gap is located midway of the longitudinal member for engagement with the recoil spring.

5. The hitching assembly according to claim 4, wherein a section of the longitudinal tubular member extends to the exterior of the housing at each end of the longitudinal tubular member, and further includes a groove at each end of the longitudinal tubular member for permitting a C-clip at each end of the longitudinal tubular member to secure the locking pin to the housing.

6. The hitching assembly according to claim 1, wherein the housing is a single unitary body, wherein the housing has openings at each side of the housing for permitting passage of the retractable mechanism therethrough.

7. The hitching assembly according to claim 1, wherein the handle includes a damping mechanism, wherein the damping mechanism includes an elastic band.

8. The hitching assembly according to claim 1, wherein the attachment mechanism further includes at least one connector cooperatively coupled to the at least one connector.

9. The hitching assembly according to claim 1, wherein the attachment mechanism includes at least one quick-release connector for coupling to a rear end of the light transport vehicle.

10. The hitching assembly according to claim 1, further comprising a stopper attached to an end of the cord.