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(54) **SYSTEM AND METHOD FOR HOLDING
RUNNING SHOES AND OTHER TRIATHLON
EQUIPMENT FOR OPTIMAL TRANSITION
SPEED DURING A TRIATHLON**

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(US)

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248/121; 211/37; 211/85.7; 248/469; 248/474;
211/85.3

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(57) **ABSTRACT**

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One embodiment is directed to a system for improving triathlon transition area efficiency, comprising a main stand member comprising a base portion and a top portion, the base portion being configured to be supported by a ground surface; and a first shoe coupler fixedly coupled to the top portion of the main stand member and configured to removably couple a first shoe to the main stand member in a manner wherein a pose is established for the first shoe such that a foot of a standing athlete may be urged into the first shoe without the use of one or more hands of the athlete to stabilize the shoe.

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(60) Provisional application No. 61/529,690, filed on Aug. 31, 2011.

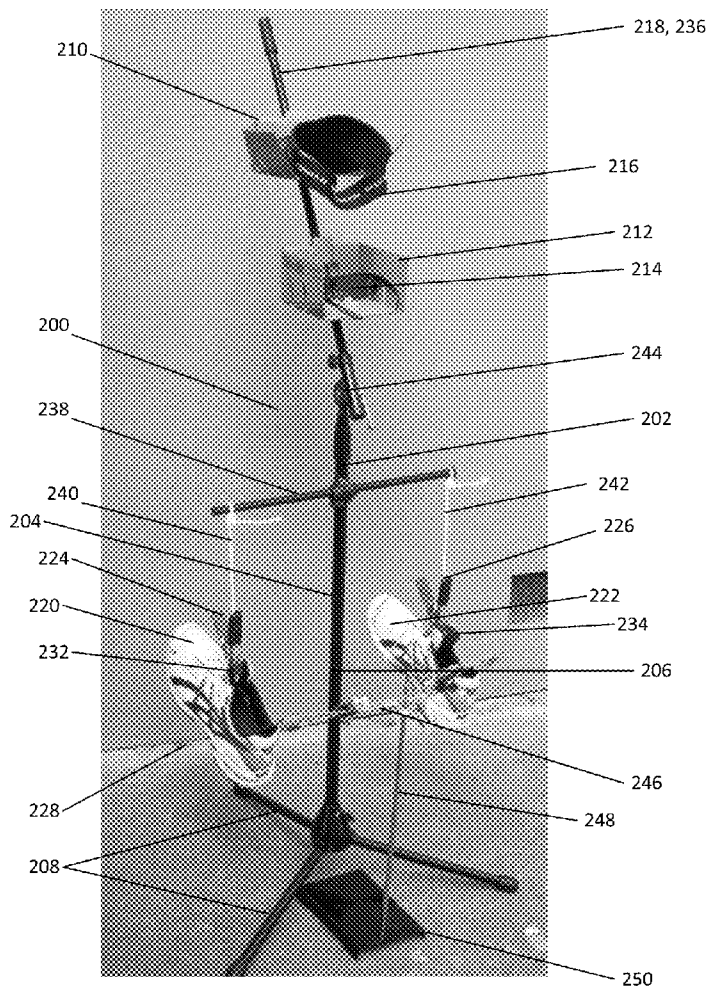




Figure 1

2

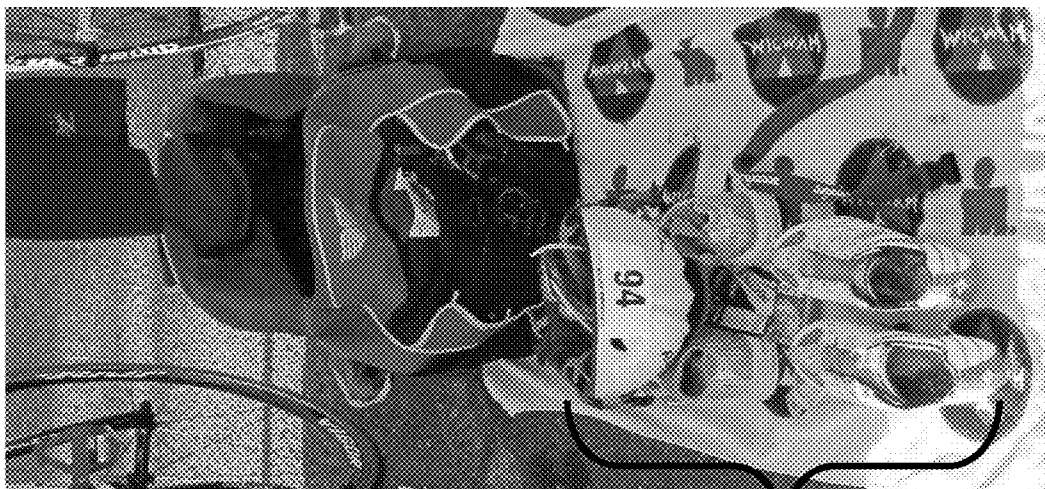


Figure 2B



Figure 2A

4



Figure 3B

10

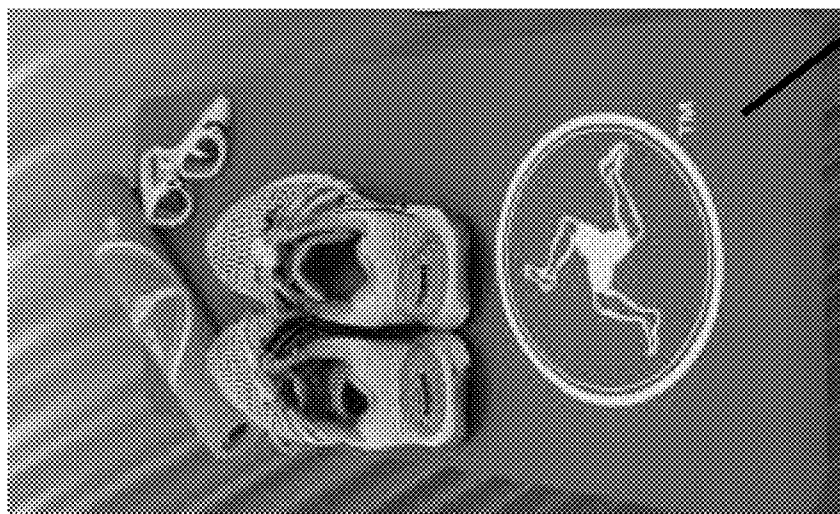


Figure 3A

8

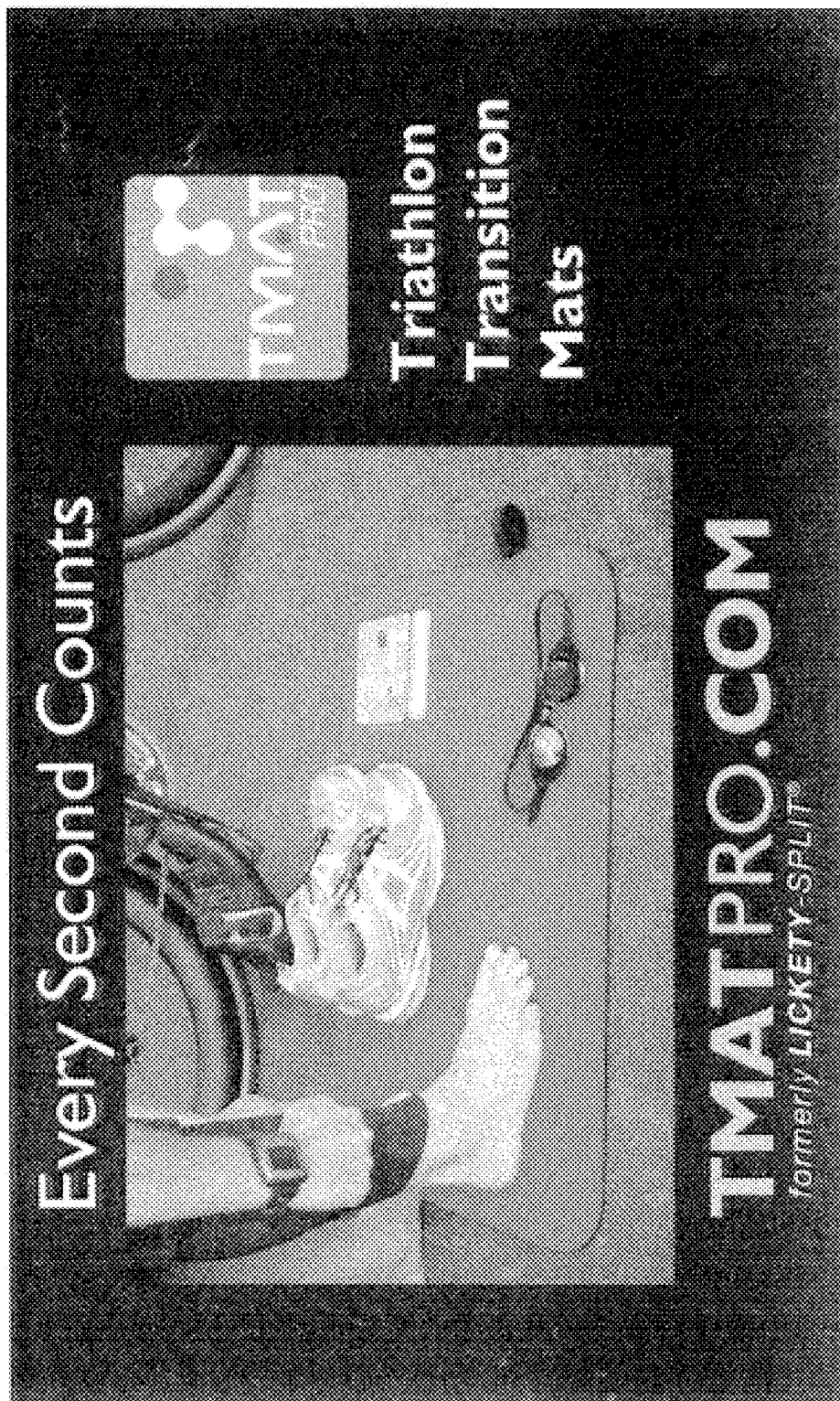


Figure 4



Figure 5A

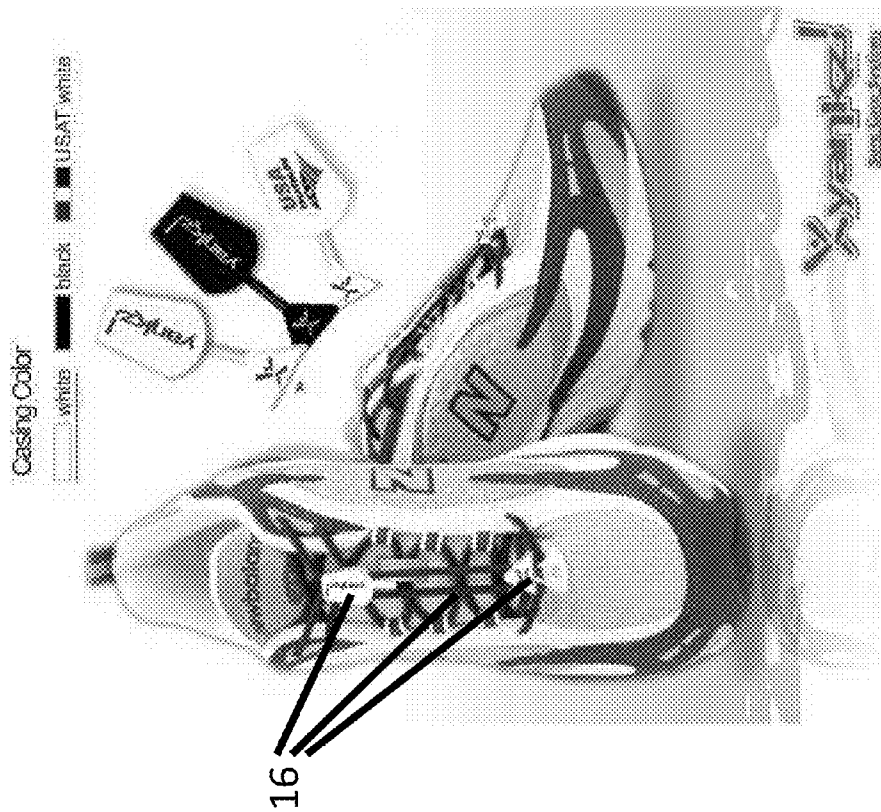


Figure 5C

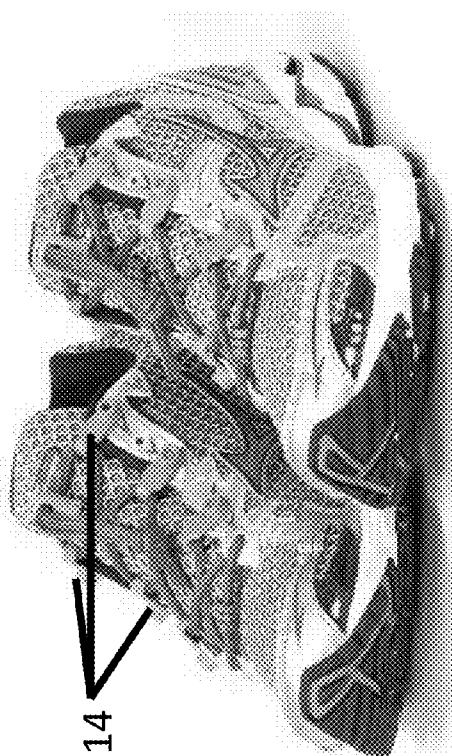


Figure 5B



Figure 6 18



20

Figure 7



Figure 8C



22

Figure 8A



24

Figure 8B

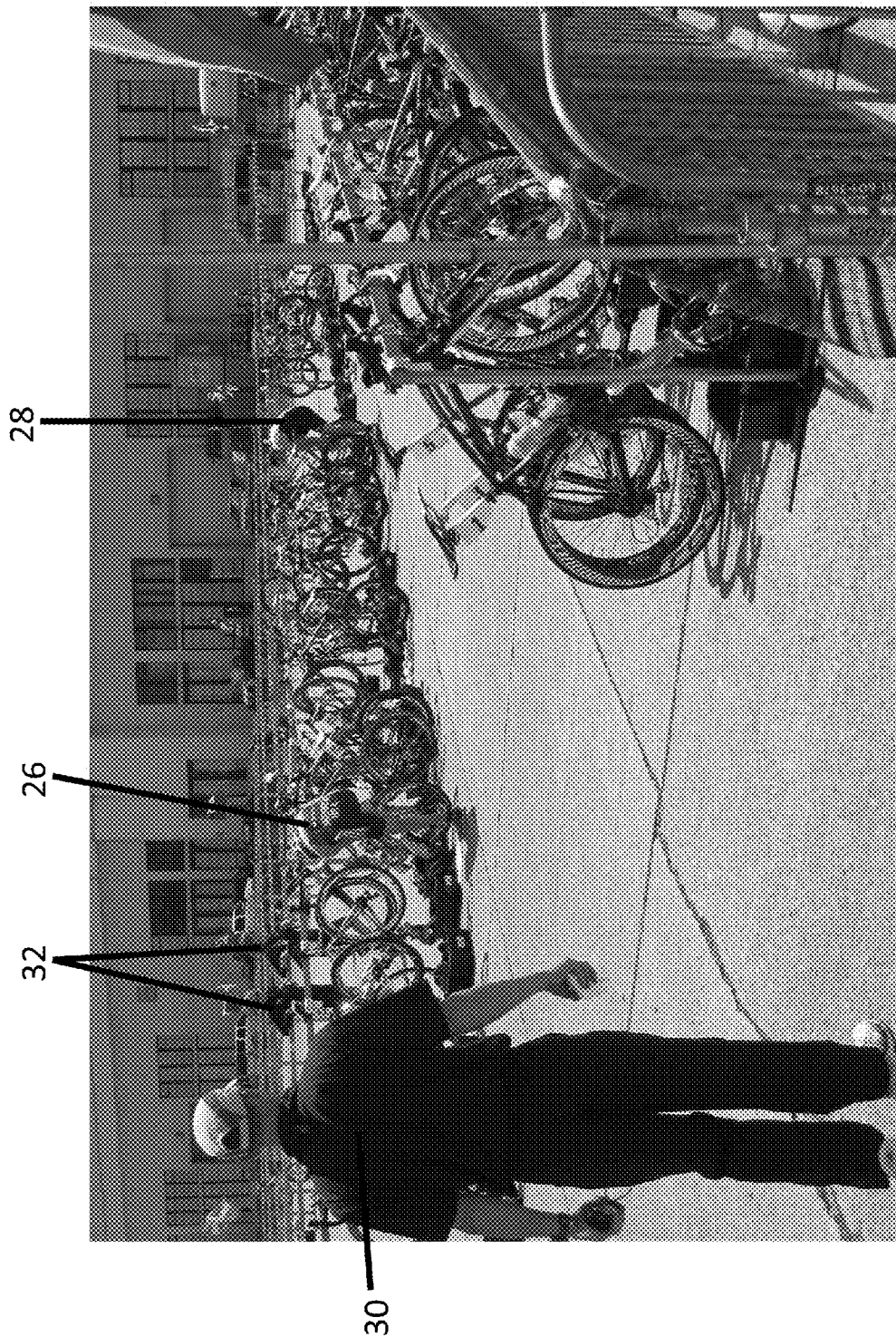


Figure 9

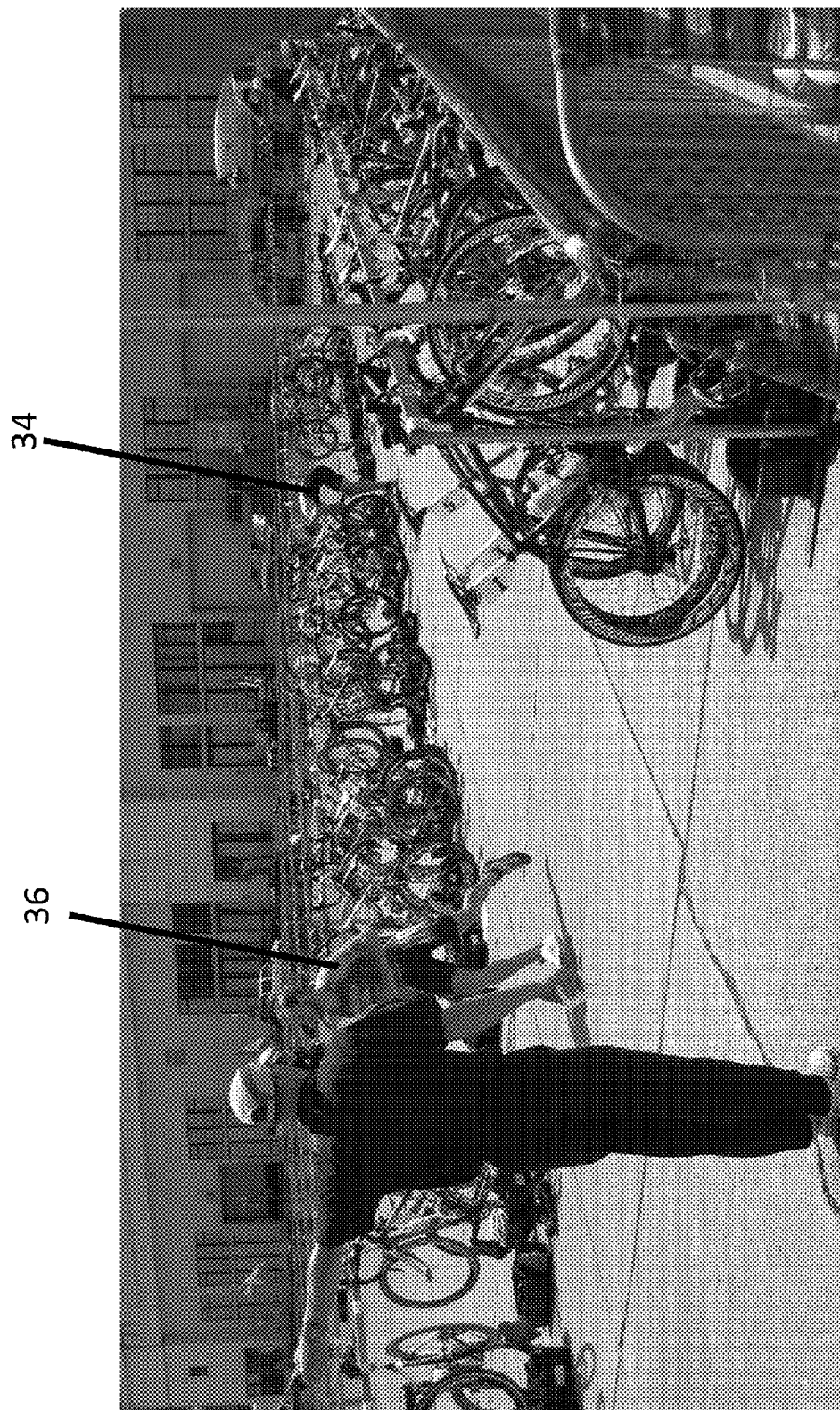


Figure 10

38



Figure 11

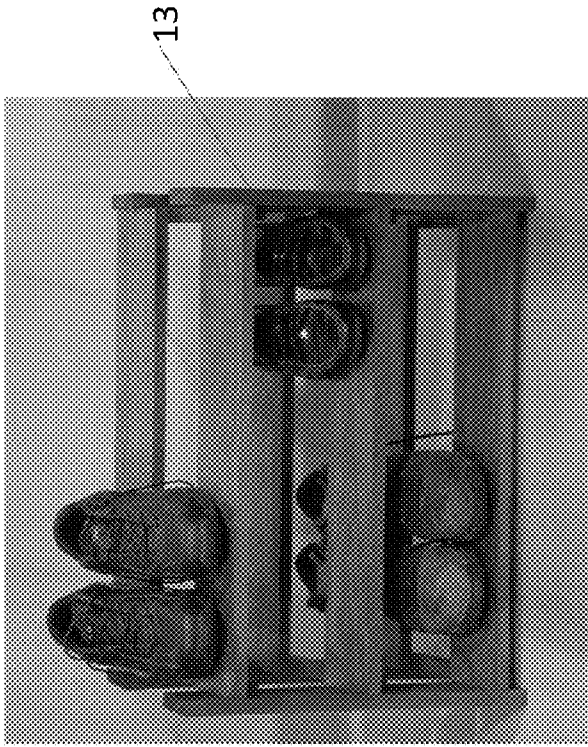


Figure 12A

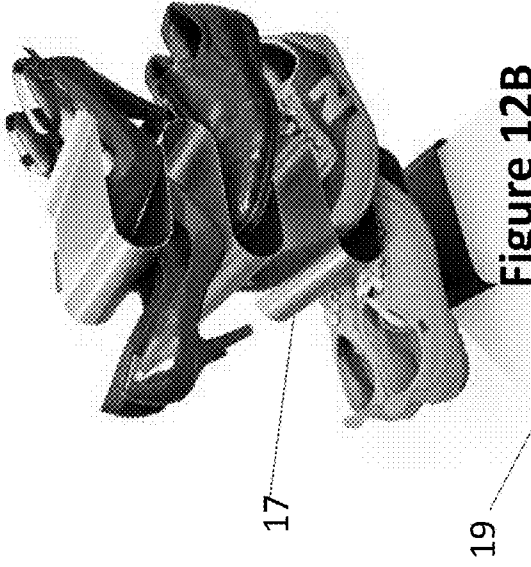


Figure 12B



Figure 12D

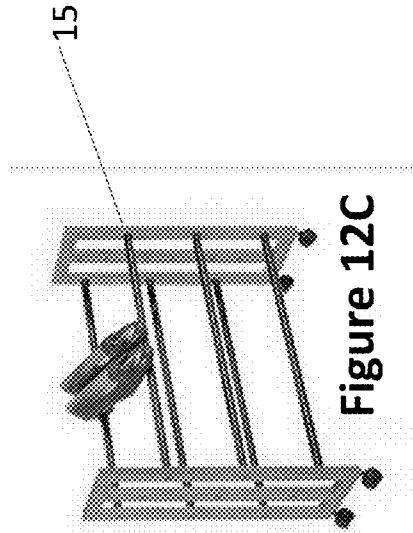


Figure 12C



Figure 13A

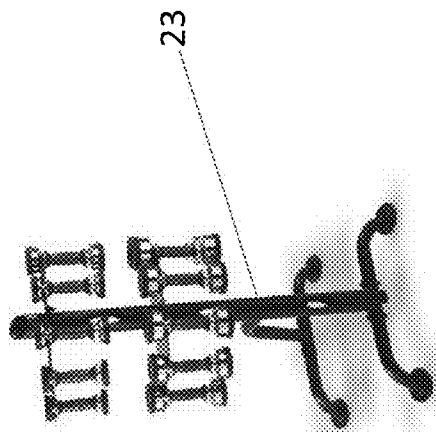


Figure 13B

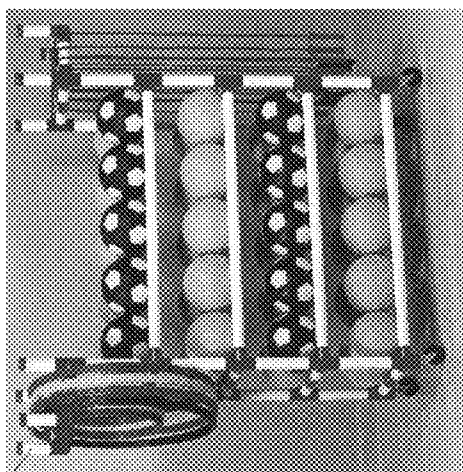


Figure 13D

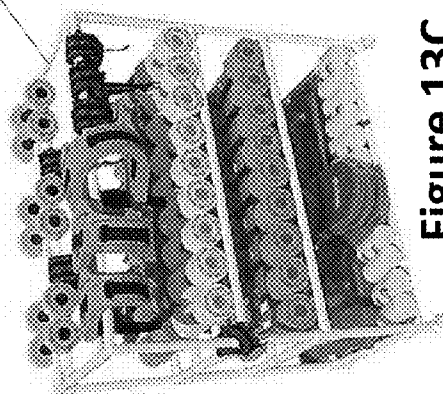


Figure 13C

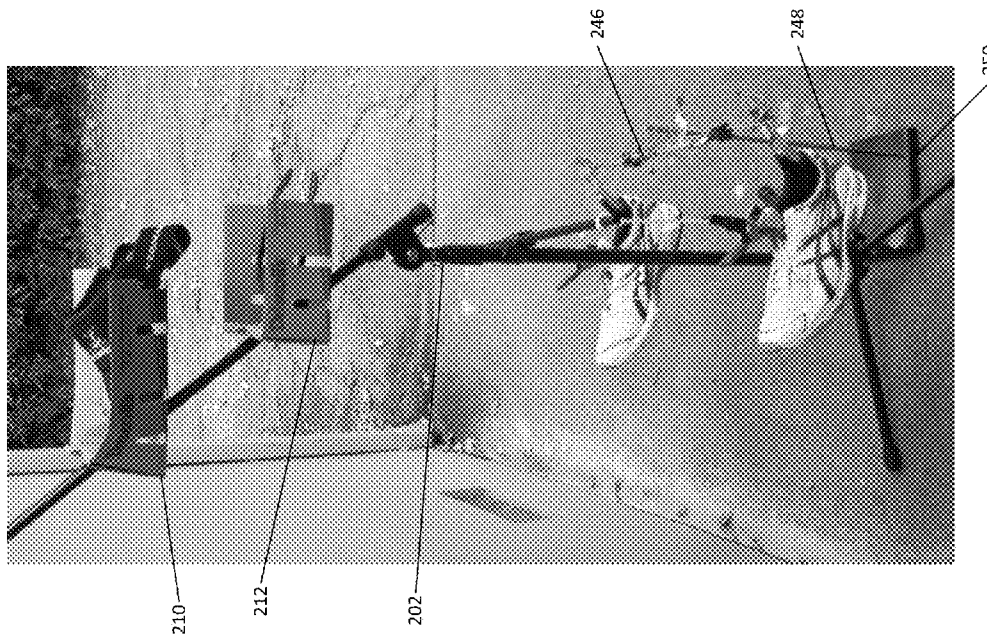


Figure 14B

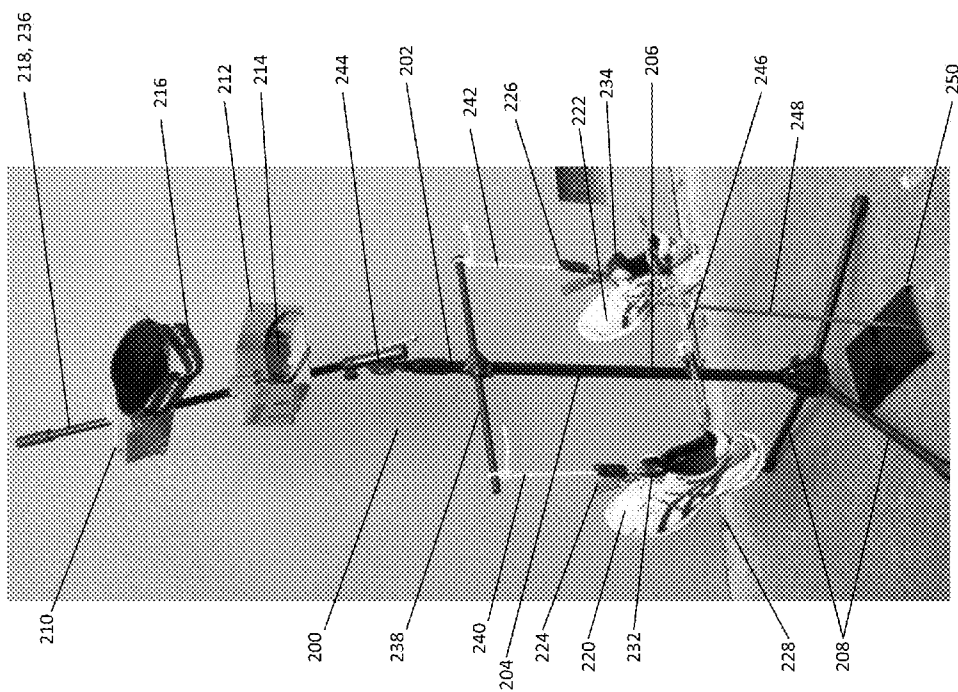


Figure 14A

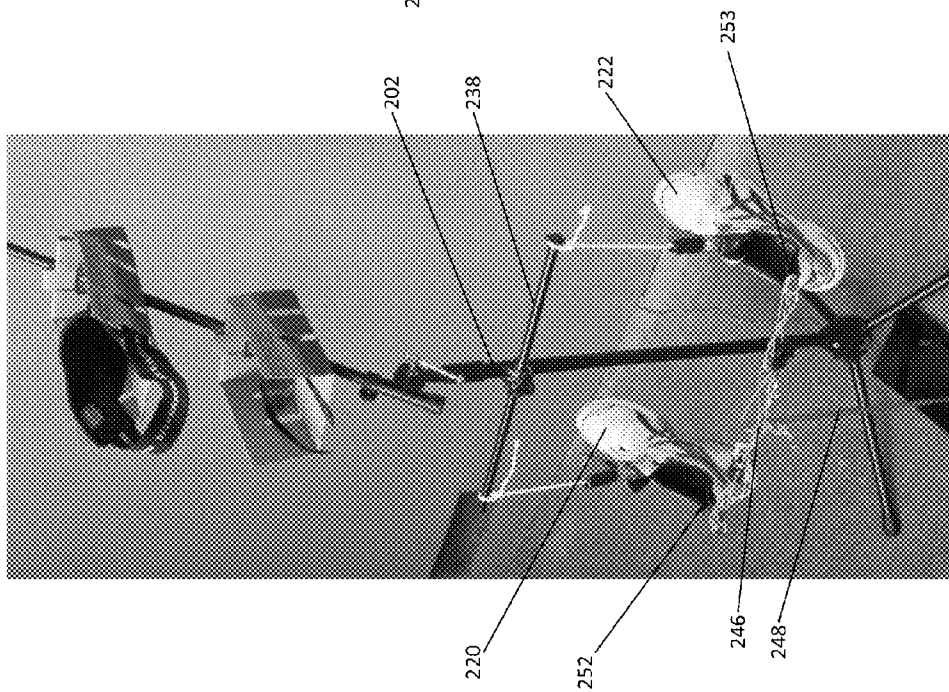


Figure 14C

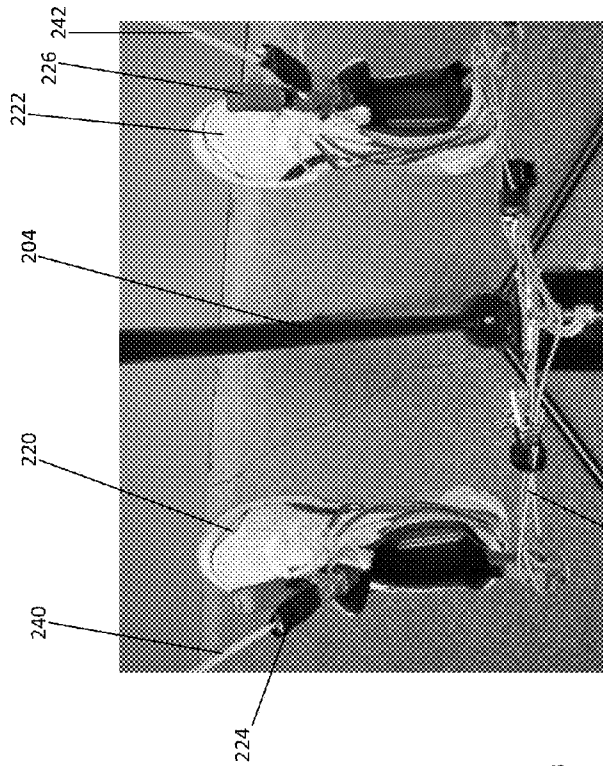


Figure 14D

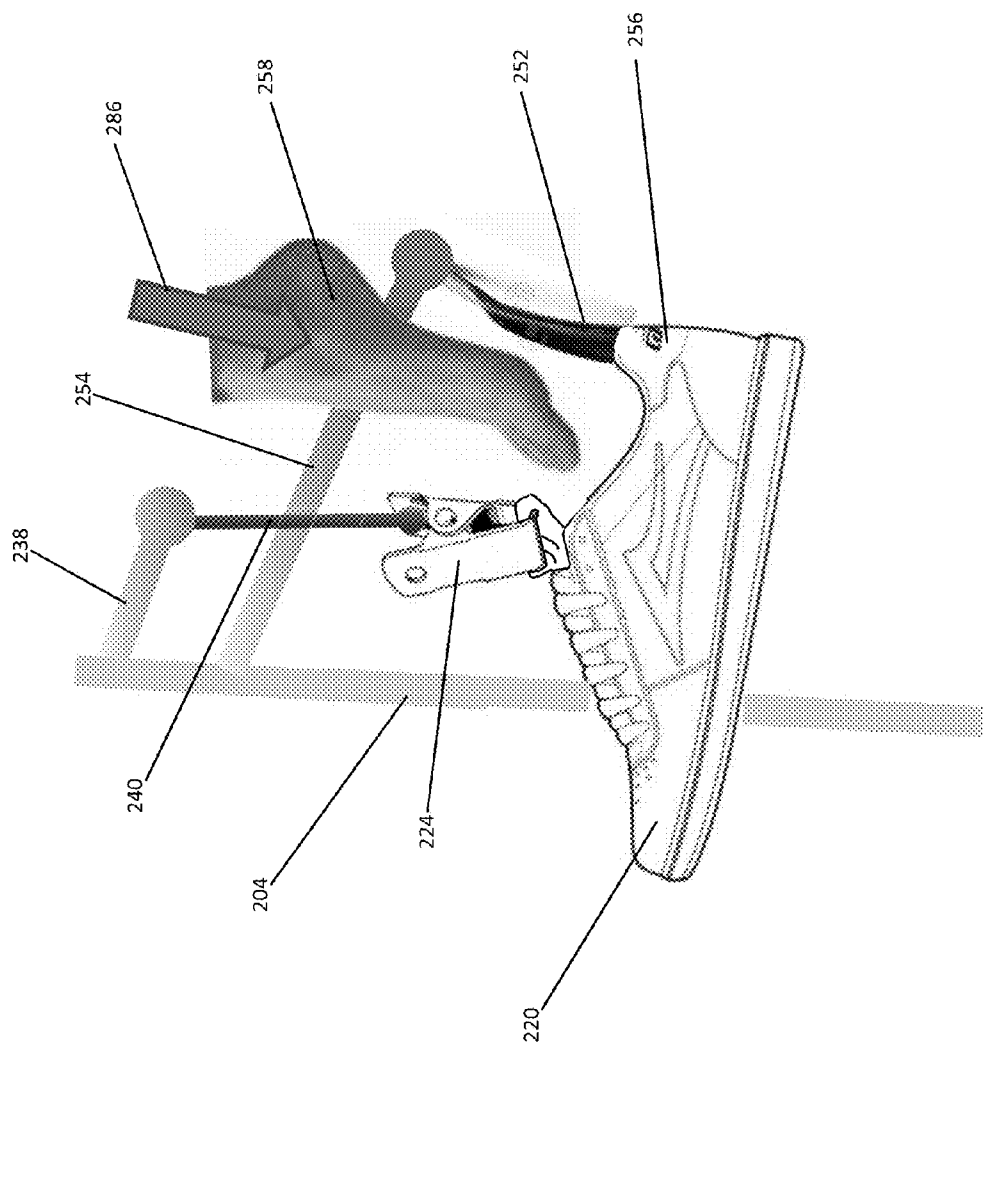


Figure 15

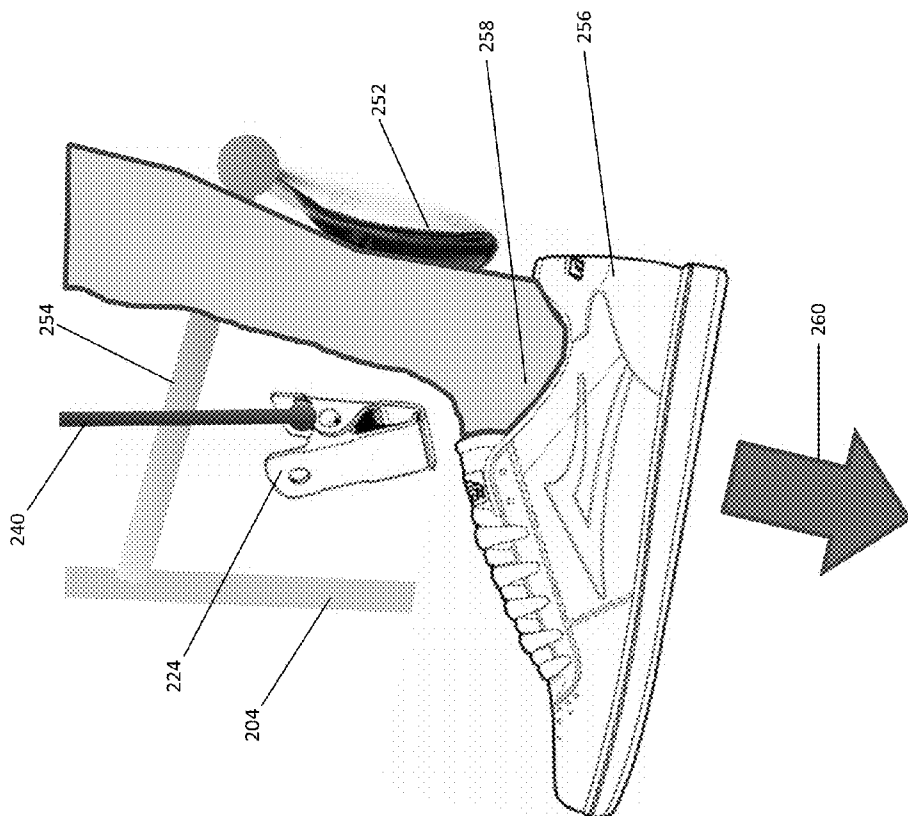


Figure 16

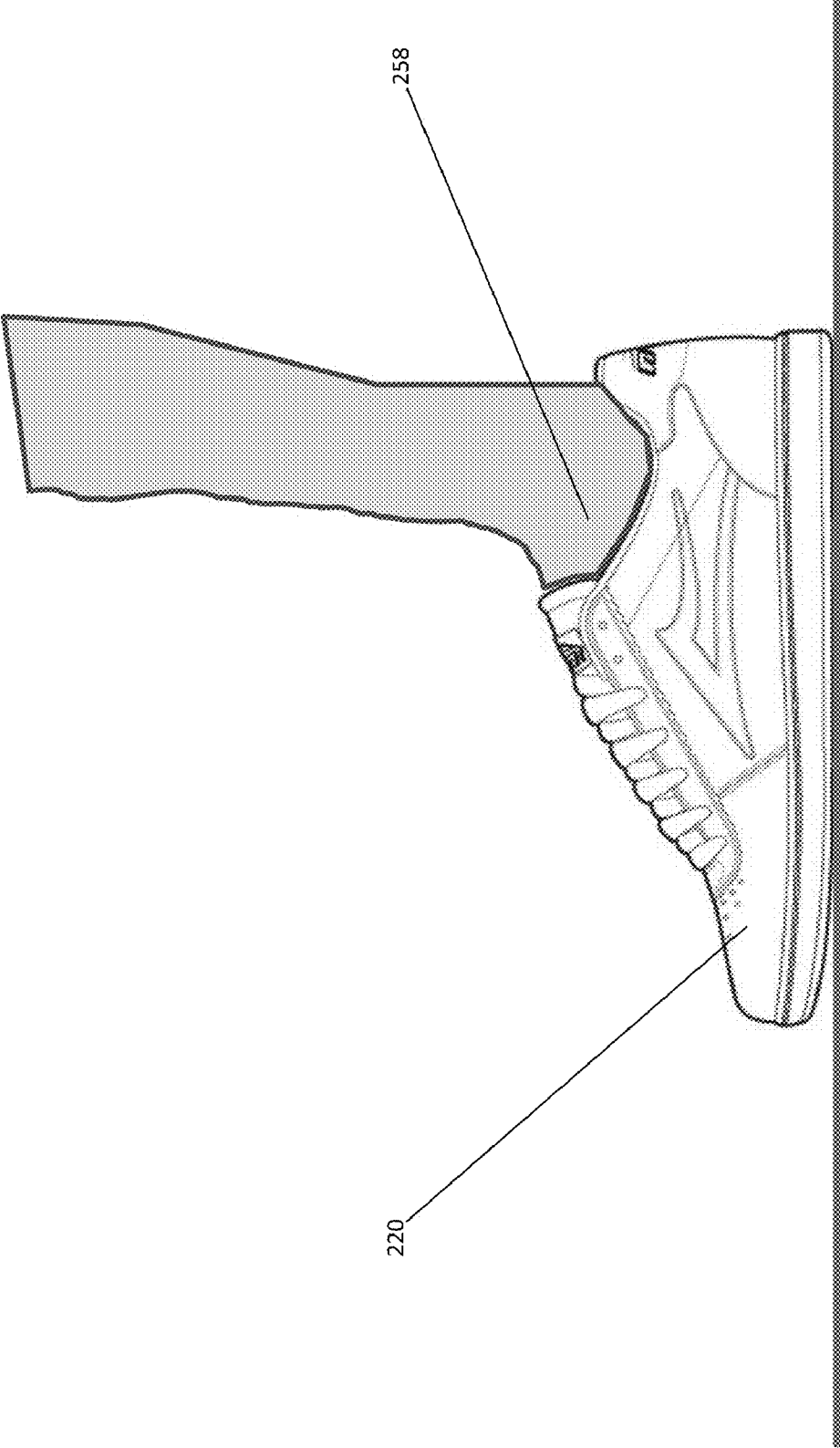


Figure 17

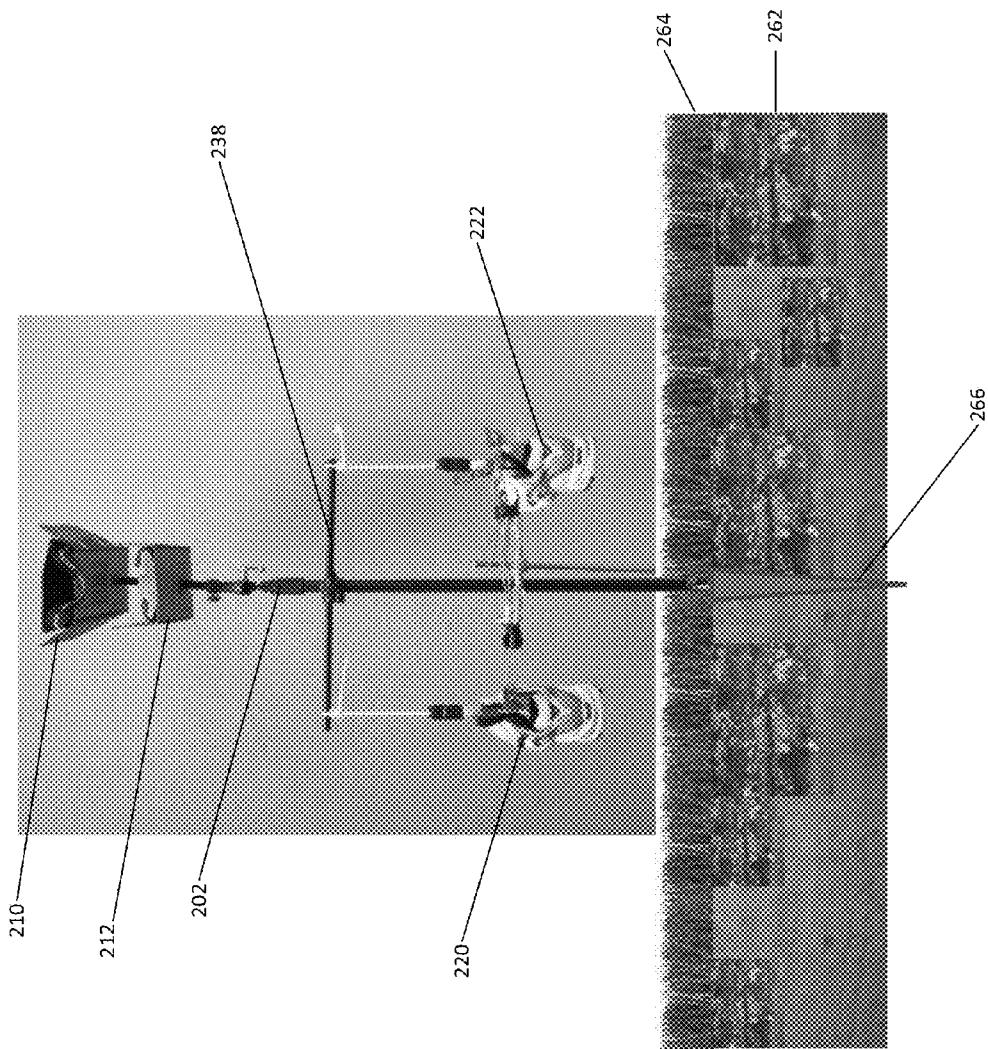


Figure 18



Figure 19

270



Figure 20

270

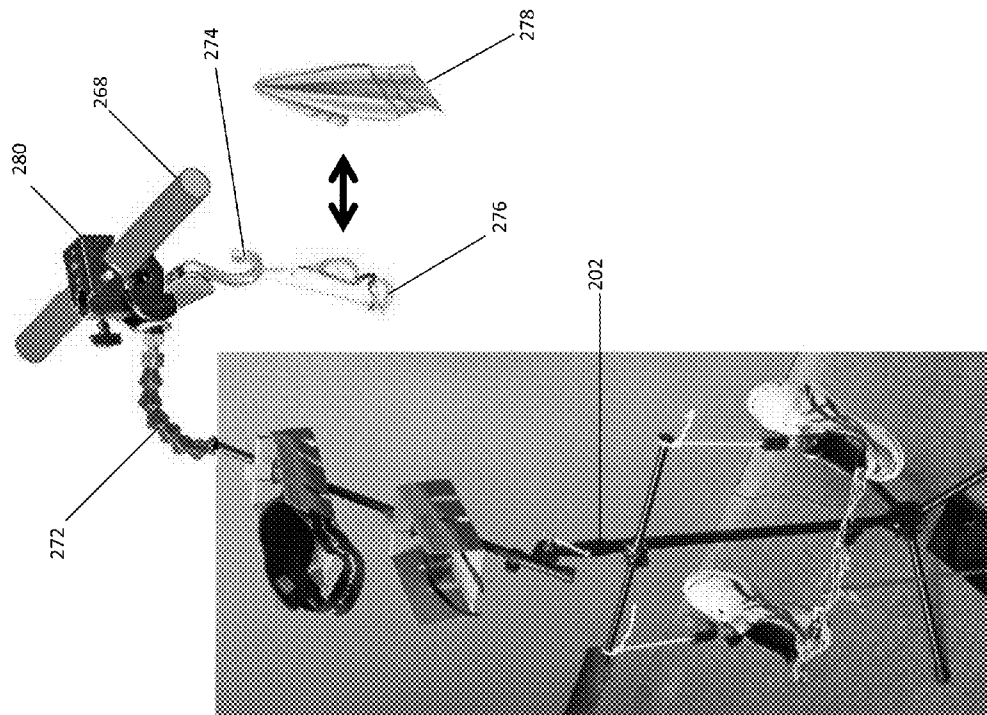


Figure 22

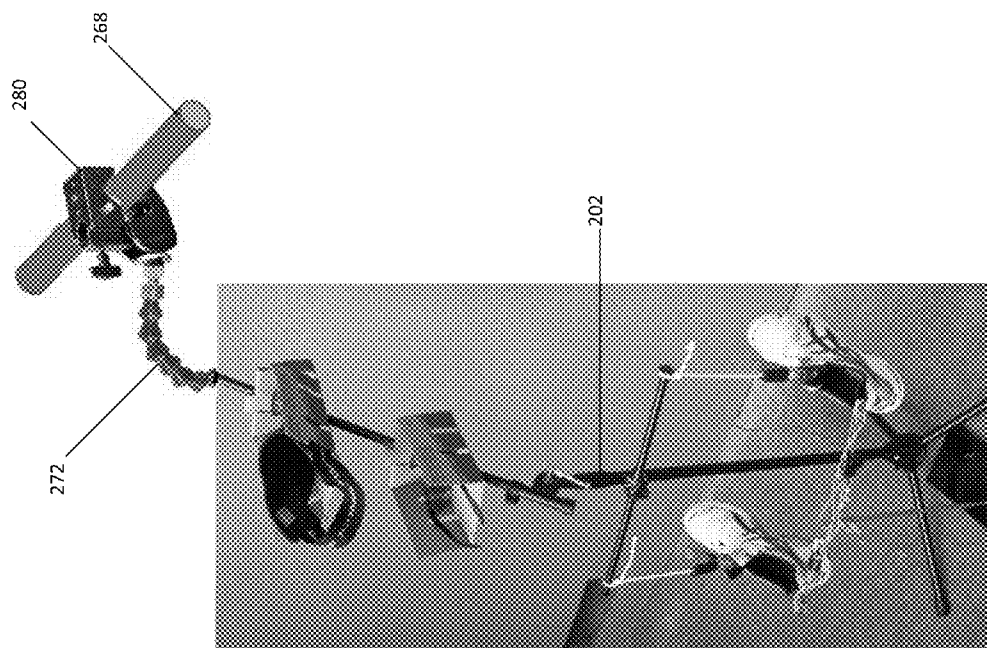


Figure 21

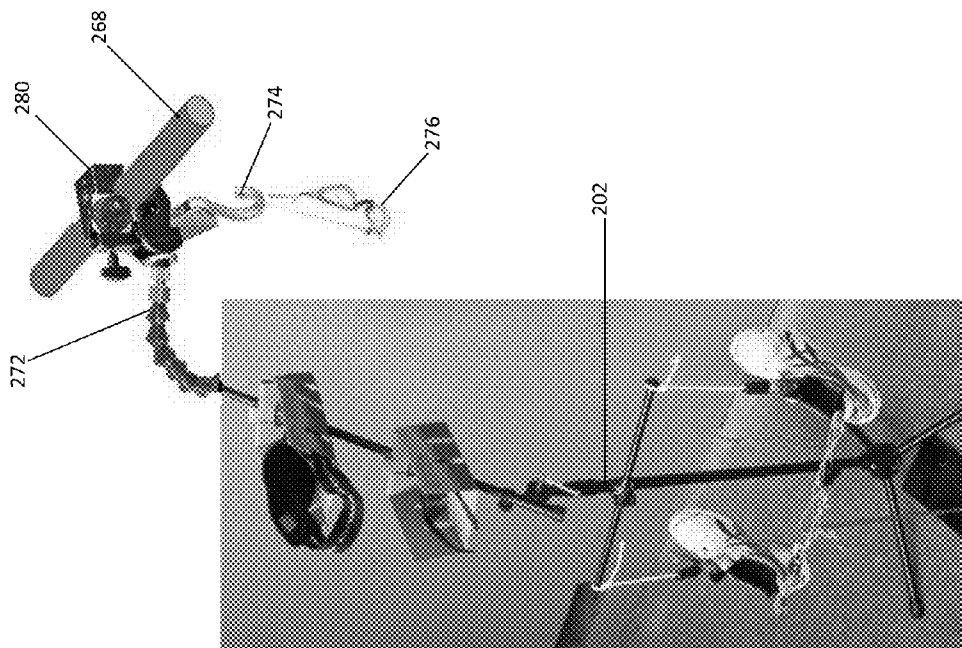


Figure 24

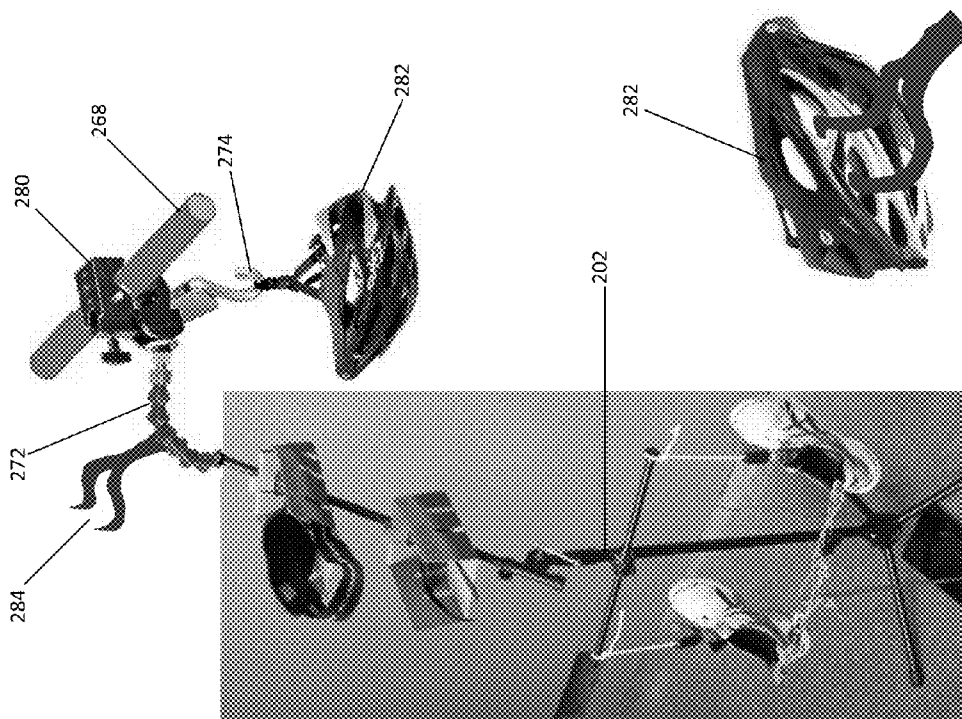


Figure 23B

Figure 23A

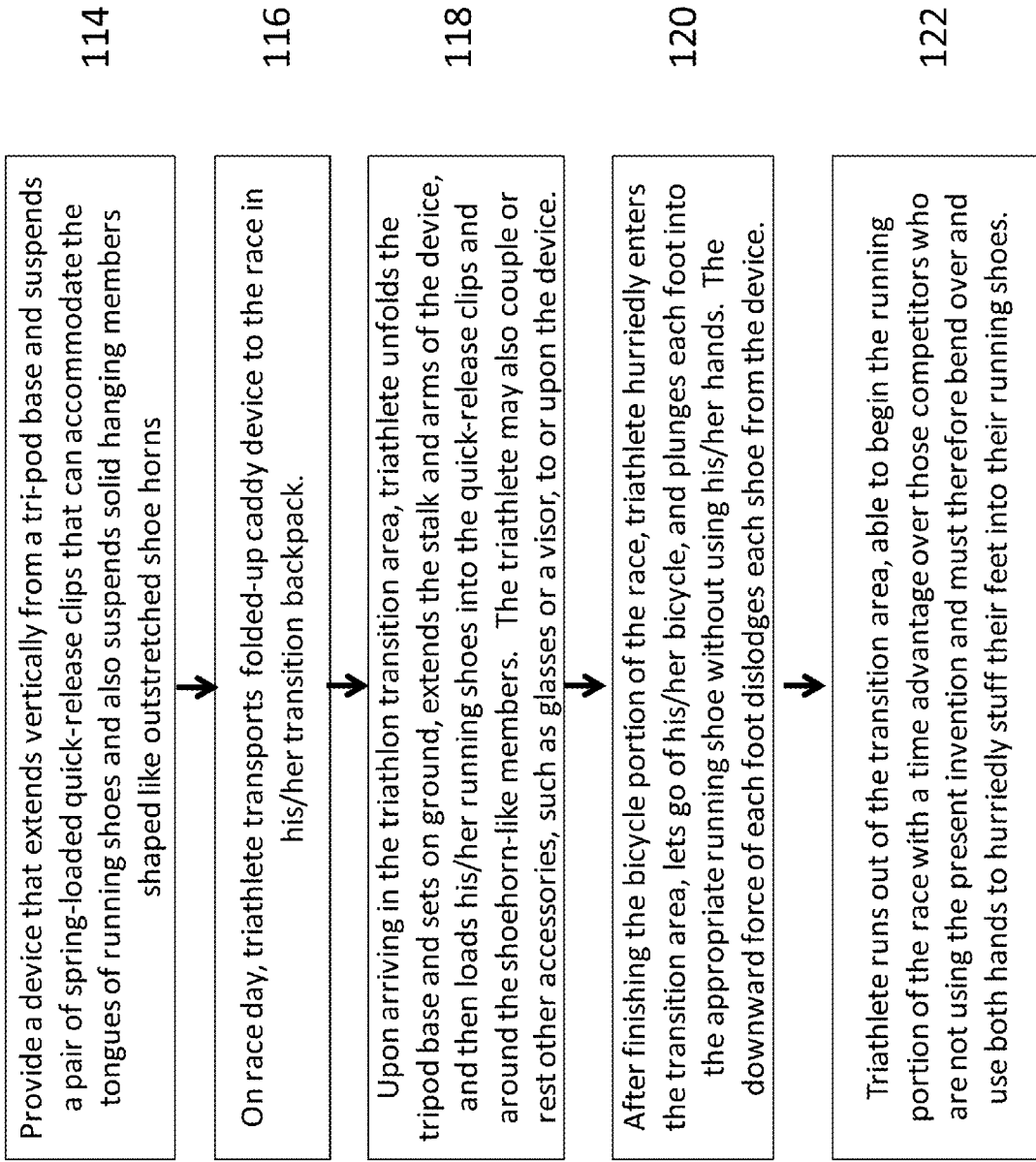


Figure 25

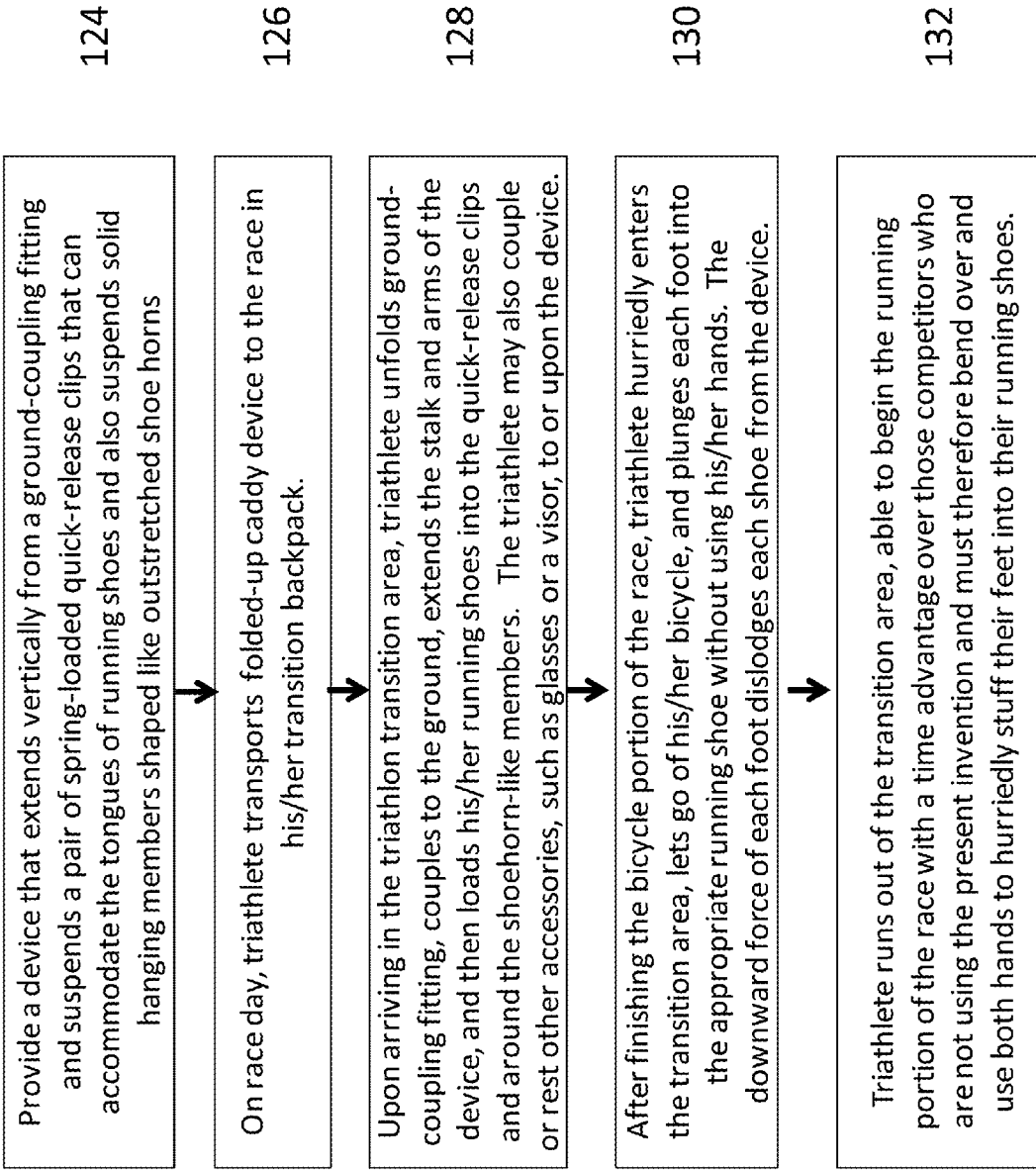


Figure 26

**SYSTEM AND METHOD FOR HOLDING
RUNNING SHOES AND OTHER TRIATHLON
EQUIPMENT FOR OPTIMAL TRANSITION
SPEED DURING A TRIATHLON**

FIELD OF THE INVENTION

[0001] The present invention relates generally to sports equipment racking systems, and specifically to technologies for athletes competing in events such as triathlon, wherein efficient equipment change and access to various accessories and components may be important to the athlete's overall time or result.

BACKGROUND

[0002] Athletes competing in triathlons will often win first, second, or third place in the event by beating their opponents to the finish line by just a few seconds. Over the course of a 2-hour Olympic-distance triathlon, an average of two to three minutes of the athlete's time is spent "in transition." Transition time in a triathlon is defined as time spent by the athlete doing activities other than swimming, bicycling, or running, such as taking off a wet suit, putting on a bicycle helmet, putting on running shoes, donning sunglasses, or attaching a racing number around one's waist.

[0003] Since the swimming, biking, and running speeds of competitive triathletes are often quite similar, spending 10 or 20 seconds less time in transition may very well make the difference between winning a race and taking second place, or between third place and fourth place, etc. Therefore, triathletes put great effort into being efficient while in transition. For example, they typically attempt to physically arrange their racing equipment (running shoes, bicycle helmet, etc.) before the start of the race within the confines of their allotted space in the transition area (FIGS. 1-2B; elements 2,4,6) so that each item will be convenient to find and grab during the race. They may buy portable mats that they think will help them arrange their shoes and other items efficiently (FIGS. 3A-B; elements 8,10), and companies advertise these "Triathlon Transition Mats" to them with slogans like "Every Second Counts" in print advertisements (11), as shown in FIG. 4. They buy time-saving devices, such as elastic cinchable shoelace holding systems (FIGS. 5A-B; elements 12, 14) and shoelace substitutes (FIG. 5C; element 16) to allow them to skip the 10-second process of tying their shoes. Such athletes typically look for any possible technique to minimize the time they spend in transition, such as clipping their bicycle shoes to their bicycle pedals before the race begins and suspending their bicycle shoes to the sides of their bicycle with small rubber bands (FIG. 6; element 18) or even specially-designed clips with spring-loaded elastic reels (FIG. 7; element 20), to allow them to skip the approximately 10-20 second process of putting their bicycle shoes on during the first of their two visits through the transition area during a race (known as "T1", wherein a triathlete switches from swimming to cycling).

[0004] During the second of their two visits through the transition area during a race (known as "T2", wherein a triathlete switches from cycling to running), immediately after letting go of their bicycle (FIG. 8A; element 22), triathletes typically spend 10-30 seconds bending down to grab their running shoes (FIG. 8B; element 24) and using their hands to

hold their shoes while they hurriedly, sometimes frantically, push their feet into them while the clock ticks and spectators watch (FIG. 8C).

[0005] When two competing athletes enter "T2" at approximately the same time (FIG. 9), it becomes obvious to the athletes (26, 28), the referees (30), and any onlookers (32) that the athlete who spends less time bent over donning his/her shoes will be able to begin the run segment of the triathlon sooner and therefore have a significant advantage toward winning the race.

[0006] Referring to FIG. 9, Athletes A and B (elements 26 and 28 respectively) have entered the transition area for T2 at approximately the same time. Each athlete rushes to his designated spot in the transition area, bends over in a hunched-back fashion (26, 28), and hurriedly dons his running shoes. Athlete A is about 10 seconds faster in donning his shoes than Athlete B is. Referring to FIG. 10, Athlete B (34) is still hunched over working his shoes onto his feet while Athlete A (36) sprints out of the transition area, gaining a significant lead. Referring to FIG. 11, Athlete B (38) then begins his run, but must now make up the 10 seconds he lost in order to have any chance of catching up to Athlete A. The extra time that Athlete B spend bent over working his shoes onto his feet may very well cost him the race.

[0007] While there are conventional shoe racks or shoe storage structures, such as those illustrated in FIGS. 12A-D (elements 13, 15, 17, and 19), and conventional devices for racking or storing other athletic equipment, such as those illustrated in FIGS. 13A-D (elements 21, 23, 25, and 27), none are currently adapted to be used in triathlon transition areas and in particular are not able to hold or suspend running shoes in such a way that a rushed athlete can don them without using his/her hands.

[0008] There is a need for a device that holds a pair of running shoes in such a position that a rushed triathlete can don them without using his or her hands, and without bending down, thereby saving valuable seconds during a race.

SUMMARY

[0009] One embodiment is directed to a system for improving triathlon transition area efficiency, comprising: a main stand member comprising a base portion and a top portion, the base portion being configured to be supported by a ground surface; and a first shoe coupler fixedly coupled to the top portion of the main stand member and configured to removably couple a first shoe to the main stand member in a manner wherein a pose is established for the first shoe such that a foot of a standing athlete may be urged into the first shoe without the use of one or more hands of the athlete to stabilize the shoe. The base portion may comprise a substantially straight elongate member. The base portion may be oriented substantially perpendicularly relative to the ground surface. The base portion may comprise an above-ground stand. The above-ground stand may comprise three or more legs. The base portion may comprise a ground-coupling feature configured to temporarily couple one end of the base portion to a ground portion below the ground surface. The ground-coupling feature may comprise a sharpened end of the base portion configured to be forcibly driven into the ground portion below the ground surface. The ground-coupling feature may comprise a substantially helical end fitting configured to be augered into the ground portion below the ground surface. The first shoe coupler may comprise a two-sided clip biased to removably grasp a tongue of the shoe. The two-sided clip may be con-

figured to grasp the tongue to retain the pose of the first shoe until the foot of the standing athlete is urged into the shoe, thereby placing a separating force on the first shoe which causes the tongue to become uncoupled from the clip. The system further may comprise a second shoe coupler fixedly coupled to the top portion of the main stand member and configured to removably couple a second shoe to the main stand member in a manner wherein a pose is established for the second shoe such that a foot of a standing athlete may be urged into the second shoe without the use of one or more hands of the athlete to stabilize the second shoe. The first shoe coupler may comprise a two-sided clip biased to removably grasp a tongue of the shoe. The two-sided clip may be configured to grasp the tongue to retain the pose of the first shoe until the foot of the standing athlete is urged into the shoe, thereby placing a separating force on the first shoe which causes the tongue to become uncoupled from the clip. The system further may comprise a shoe alignment member removably coupling the first shoe to the second shoe to maintain spatial alignment of the shoes relative to each other. The system further may comprise a first shoe heel coupler member removably coupled between a heel of the first shoe and the main stand member to further stabilize and maintain the pose of the first shoe. The system further may comprise a second shoe heel coupler member removably coupled between a heel of the second shoe and the main stand member to further stabilize and maintain the pose of the second shoe. The top portion may comprise a substantially straight elongate member. The top portion may comprise a bike rack coupler fitting configured to be removably coupled to a nearby bicycle rack for additional stability of the main stand member in the triathlon transition area. The system further may comprise an accessory hook member coupled to the main stand member and configured to hold one or more triathlon accessory items. The one or more triathlon accessory items may be selected from the group consisting of: a pair of goggles, a pair of sunglasses, a visor, a running hat, and a bicycle helmet. The system further may comprise an accessory shelf coupled to the main stand member and configured to hold one or more triathlon accessory items. The one or more triathlon accessory items may be selected from the group consisting of: a pair of goggles, a pair of sunglasses, a visor, a running hat, and a bicycle helmet. The system further may comprise a mirror coupled to the main stand member. The mirror may be movably coupled to the main stand member with one or more adjustable structures such that the mirror may be posed in a particular orientation by the athlete. The one or more adjustable structures may be selected from the group consisting of: a single joint; a multi-joint construct; and a bendable member.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIGS. 1, 2A, and 2B illustrate examples of triathlon transition areas in which triathletes have taken time and effort to arrange their running shoes and other racing items in an organized fashion in hopes that it will lead to fewer seconds expended “in transition” (between swimming and cycling and between cycling and running).

[0011] FIGS. 3A-B illustrate specialized triathlon transition mats intended to help triathletes organize the items in their transition area.

[0012] FIG. 4 illustrates an advertisement for a triathlon transition mat featuring the slogan that best embodies the goals of triathletes with regard to organizing their transition areas: “Every Second Counts.”

[0013] FIGS. 5A-C illustrate commonly-used shoelace aids and shoelace substitutes that eliminate the need to tie one’s shoelaces during a triathlon.

[0014] FIG. 6 illustrates the practice, common among serious triathletes, of using thin rubber bands to attach the backs of biking shoes to a bicycle, for the purpose of saving a few seconds in transition by avoiding the process of struggling to put on one’s bike shoes before beginning to ride the bike.

[0015] FIG. 7 illustrates Tri-Clips® devices for aiding triathletes in suspending their bicycle shoes from the frame of their bicycles in fashion similar to the use of rubber bands shown in FIG. 6, again for the purpose of saving a few seconds in transition during a race.

[0016] FIGS. 8A-C illustrate a triathlete entering a transition area after finishing the bicycle portion of the race, first racking and letting go of his bicycle (8A), then bending over and hurriedly or even frantically using his hands to hold his shoes while pushing his feet into his shoes (8B) while the clock ticks and spectators watch (8C).

[0017] FIG. 9 illustrates a situation in which two triathletes enter the transition area at the same time, racing each other to don their running shoes because each hopes to gain a few seconds head start over the other.

[0018] FIG. 10 illustrates the same transition area shown in FIG. 9, but 10 seconds later. One triathlete has apparently managed to don his running shoes faster than the other one has and is therefore gaining a head start on the run portion of the race.

[0019] FIG. 11 illustrates the same transition area shown in FIGS. 9 and 10, but another 10 seconds later. In this Figure, the second triathlete has finally finished putting on his running shoes, and must clearly work extra hard to attempt to catch up with the first runner.

[0020] FIGS. 12A-D illustrate various commercially-available shoe racks.

[0021] FIGS. 13A-D illustrate various athletic equipment holding racks.

[0022] FIGS. 14A-D illustrate one embodiment of the present invention, featuring an apparatus for suspending a pair of running shoes in the air in a specific position and orientation (or “pose”) optimized for hands-free shoe-donning by a hurried triathlete who has just completed the bicycle segment of a triathlon and is ready to begin the running segment.

[0023] FIG. 15 illustrates the approach that a triathlete’s outstretched and pointed foot will take during the T2 portion of a triathlon as it enters a running shoe that has been removably coupled to one embodiment of the present invention.

[0024] FIG. 16 illustrates the position of a triathlete’s foot and running shoe shortly after the foot has entered the shoe. The downward momentum of the foot, and the triathlete’s body weight, free the shoe from both the quick-release clip and the shoehorn-like member.

[0025] FIG. 17 illustrates the position of a triathlete’s foot and running shoe another split-second later as they hit the ground using one embodiment of the present invention, with foot-in-shoe and ready to run.

[0026] FIG. 18 illustrates another embodiment of the present invention in which the tripod-like base of the previously-depicted embodiments is replaced with a sharp metal spike configuration suitable for piercing the ground surface of a grassy-field triathlon transition area and coupling to the material below to hold the inventive structure in place relative to the ground surface.

[0027] FIG. 19 illustrates a typical grassy-field triathlon transition area.

[0028] FIG. 20 illustrates a typical parking-lock asphalt triathlon transition area.

[0029] FIG. 21 illustrates another embodiment of the present invention featuring a top portion comprising a bendable arm terminating in a bike rack coupling member or fitting, such as a clamp with adjustable screw sized to be attached to a horizontal beam of triathlon transition area bicycle rack.

[0030] FIG. 22 illustrates another embodiment of the present invention in which the top of the inventive structure features the same configuration as illustrated in FIG. 21, and also features a side hook or hanging member for hanging other items of triathlon racing gear.

[0031] FIGS. 23A-B illustrate another embodiment of the present invention with the same features as the embodiment illustrated in FIG. 22, but also with bicycle helmet holding features, making it useful for the “T1” portion of a triathlon in addition to “T2.”

[0032] FIG. 24 illustrates another embodiment of the present invention with features similar to the embodiment illustrated in FIG. 22, but also with a combination or key lock incorporated into the bike rack coupling clamp configuration.

[0033] FIG. 25 illustrates one embodiment of a configuration for utilizing a triathlon transition area efficiency structure such as those described herein.

[0034] FIG. 26 illustrates one embodiment of a configuration for utilizing a triathlon transition area efficiency structure such as those described herein.

DETAILED DESCRIPTION

[0035] In accordance with the present invention, a pair of athletic running shoes may be held suspended in air with an easy-release clip holding up each shoe's tongue and a shoe-horn-like member making it possible for a rushed athlete to don the shoes without using his/her hands. For descriptive purposes, the overall assembly or structure may be referred to as a “transition area efficiency structure”, “efficiency structure”, or “Caddy”.

[0036] Referring to FIGS. 14A-D, in one embodiment, an efficiency structure (200) comprises a main stand member (202) which may comprise a base portion (204) and a top portion (218). The base portion may comprise a substantially straight elongate member (206) as shown, as well as a supporting structure, such as an above-ground stand comprising three or more legs (208). The stand may be configured to orient the substantially straight elongate member (206) in a substantially perpendicular orientation relative to the adjacent ground surface or other surface. The top portion (218) may be coupled to the base portion and may also comprise a substantially straight elongate member (236), which may be adjustably oriented relative to the base portion (204) using an adjustable and lockable joint assembly (244), which may comprise a movable joint clamping member. One or more accessory shelves (210, 212) may be coupled to the top portion (218) to facilitate fast access to accessory items which may be stored thereon, such as a pair of goggles (276), a pair of sunglasses (214), a visor (216), a running hat, a towel, and/or a bicycle helmet (282). The shelves (210, 212) may be movably and/or removably coupled to the top portion (218) using movable joints or clamps to improve the customized fit and accessibility of the overall efficiency structure (200) for the athlete. A crossmember (238) is shown coupled to the

main stand member (202) with tension members (240, 242) coupled thereto. The ends of the tension members may be coupled to first and second shoe couplers (224, 226), which may comprise two-sided clips that are biased to removably grasp a structure interposed between the two sides, such as the tongue of a shoe. Referring to FIG. 14A, a tongue (232) of a first shoe (220) is shown grasped within the first shoe coupler (224) while a tongue (234) of a second shoe (222) is shown grasped within the second shoe coupler (226). The coupling configuration of the shoe couplers (224, 226) and tongues (232, 234) alone may retain the shoes (220, 222) in the depicted positions and orientations, or “poses”, depending upon the centers of gravity of the shoes (220, 222) and the positions of the tongues (232, 234). To maintain a pose as depicted for each shoe, wherein each shoe is pointed slightly gravity upward, and wherein the shoes (220, 222) are aligned approximately in parallel with each other, other structures may be utilized to support the shoes. Such a pose is desired for its ability to allow the athlete to place his feet, toes first, into the shoes in a hands-free manner, as described further below. Referring again to FIG. 14A, the depicted embodiment also comprises a shoe alignment member (246) removably coupled between the shoes (in this embodiment, between the heels of the shoes) to maintain relative alignment of the shoes (220, 224). The alignment member (246) may comprise a simple structural rod, cable, or other member configured to be removably coupled to the shoes and to apply a very slight aligning load to bias the shoes back into alignment should they start to become unaligned as they are suspended by the efficiency structure (200). The alignment member (246) may be supported by a support structure (248) such as a simple stand, which may comprise a base (250) configured to be suitable for the ground conditions (here a simple rectangular or square base configured to rest upon a substantially planar ground surface). The alignment member (246) may be coupled to the shoes (220, 222) by small shoe heel couplers (252, 253), which may resemble shoe-horn structures that are lightly inserted into the heels of the shoes (220, 222), and which may be easily pulled out as an athlete pushes his feet into the shoes, as described in further detail below.

[0037] Referring to FIG. 14B, a side view of an efficiency structure (200) similar to that of FIG. 14A is shown in side view. Referring to FIGS. 14C and 14D, close up views illustrate the shoes (220, 222) removably coupled to and suspended by the efficiency structure (200).

[0038] Referring to FIG. 15, an athlete's foot (258) is shown being inserted (286) into a suspended shoe (220) that has been positioned and oriented in a pose selected to facilitate fast insertion of the foot (258) from a standing position (i.e., with the athlete standing in the transition area rapidly trying to get changed and continue with the running portion of the triathlon)—with the toe of the shoe (220) oriented slightly gravity up from the heel (256) of the shoe (220). The embodiment of FIG. 15 varies from that of FIGS. 14A-D in that a shoe heel coupler (252) is coupled via a support member (254) directly to the main stand member (202) (in the embodiment of FIGS. 14A-D, the shoe heel coupler (252) is coupled to the shoe alignment member 246 which is coupled to the associated stand 248, 250). FIG. 16 illustrates that with further downward movement (260) of the foot (258) of the athlete, the shoe coupler (224) becomes released from the tongue of the shoe, and the shoe heel coupler (252) becomes released from the heel of the shoe, allowing the athlete to continue the downward movement until his foot/shoe assem-

bly hits the ground surface, as shown in FIG. 17, without intervention from the hands of the athlete. In other words, a time-saving hands-free shoe installation is facilitated by the efficiency structure (200).

[0039] Referring to FIG. 18, another embodiment is depicted wherein a softer ground surface, such as one comprising unimproved dirt, soft landscaping, and/or lawn, allows for coupling of the main stand member (202) directly through the ground surface (264) to the ground below, or an associated volume thereof. The embodiment of FIG. 18 features a sharpened tip (266) structure comprising the proximal end of the base portion of the main stand member (202) which may be forcibly urged into, or hammered into, the ground to support the efficiency structure. In another embodiment, a helical fitting may be coupled to the proximal end of the base portion of the main stand member (202), allowing for a helical, “augered in”, or “screwed in” type of coupling between the ground (262) and the efficiency structure (200). Referring to FIGS. 19 and 20, a triathlon transition area (270) typically is crowded, and typically comprises a horizontal bike rack member (268) to which bicycles and/or other structures may be coupled. The embodiments illustrated in FIGS. 21-22, 23A and 24 feature a releasable clamp (280) configured to allow an athlete to temporarily couple the top portion (218) of his main stand member (202) to a nearby bike rack bar (268) to provide extra stability to his efficiency structure assembly. As shown in FIGS. 21-22, 23A and 24, the releasable clamp (280) may be coupled to the top portion (218) with a movable, poseable, and/or flexible structure, such as flex joint structure (272) comprising a series of poseable joints, to facilitate customization of the fit between the bike rack bar (268) and the main stand member (202). Various accessory structures may be coupled to the efficiency structure in various locations to improve the efficient interaction of the athlete with his or her efficiency structure. For example, the embodiments of FIGS. 22, 23A and 24 feature an accessory hook coupled to the clamp (280) to facilitate hanging of an accessory such as a pair of goggles (276), a pair of sunglasses (214), a visor (216), a running hat, a towel (278), and/or a bicycle helmet (282). The embodiment of FIG. 23A features a cradle structure (284) which may be utilized to hold a bicycle helmet (element 282 of FIG. 23B, for example) in a convenient position and orientation for quick access and mounting onto the athlete’s head.

[0040] Referring to FIGS. 25 and 26, various configurations are illustrated in flowchart form.

[0041] Referring to FIG. 25, in one embodiment, a device is provided that extends vertically from a tri-pod base and suspends a pair of spring-loaded quick-release clips that can accommodate the tongues of running shoes, and also suspends solid hanging members shaped like outstretched shoe horns (114). On race day, the triathlete transports folded-up caddy device to the race in his/her transition backpack (116). Upon arriving in the triathlon transition area, the triathlete unfolds the tripod base and sets on the ground, extends the stalk and arms of the device, and then loads his/her running shoes into the quick-release clips and around the shoehorn-like members. The triathlete may also associate accessory items or tools such as sunglasses and/or visor in the device by coupling such items to the device and/or resting such items on one or more shelves coupled to the device (118). After finishing the bicycle portion of the race, the triathlete hurriedly enters the transition area, lets go of his/her bicycle, and plunges each foot into the appropriate running shoe without

using his/her hands. The downward force of each foot dislodges each shoe from the device (120). The triathlete then runs out of the transition area, able to begin the running portion of the race with a 10-20 second advantage over those competitors who are not using the present invention and must therefore bend over and use both hands to hurriedly stuff their feet into their running shoes (122).

[0042] Referring to FIG. 26, an embodiment similar to that of FIG. 21 is illustrated, with the exception that instead of a tri-pod, the base of the Caddy system features a ground-coupling feature, such as a sharp metal stake fitting or helical augering fitting, suitable for piercing the ground of a grassy field and providing support to a five-foot tall stalk with branches and hanging shoes. A system is provided that extends vertically from a ground-coupling fitting and suspends a pair of spring-loaded quick-release clips that can accommodate the tongues of running shoes, and also suspends solid hanging members shaped like outstretched shoe horns (124). On race day, the triathlete transports folded-up caddy system to the race in his/her transition backpack (126). Upon arriving in the triathlon transition area, the triathlete unfolds the ground-coupling fitting, couples it to the ground, extends the stalk and arms of the system, and then loads his/her running shoes into the quick-release clips and around the shoehorn-like members. The triathlete may also associate accessory items or tools such as sunglasses and/or visor in the device by coupling such items to the device and/or resting such items on one or more shelves coupled to the device (128). After finishing the bicycle portion of the race, the triathlete hurriedly enters the transition area, lets go of his/her bicycle, and plunges each foot into the appropriate running shoe without using his/her hands. The downward force of each foot dislodges each shoe from the Caddy (130). The triathlete then runs out of the transition area, able to begin the running portion of the race with a 10-20 second advantage over those competitors who are not using the present invention and must therefore bend over and use both hands to hurriedly stuff their feet into their running shoes (132).

[0043] Various exemplary embodiments of the invention are described herein. Reference is made to these examples in a non-limiting sense. They are provided to illustrate more broadly applicable aspects of the invention. Various changes may be made to the invention described and equivalents may be substituted without departing from the true spirit and scope of the invention. In addition, many modifications may be made to adapt a particular situation, material, composition of matter, process, process act(s) or step(s) to the objective(s), spirit or scope of the present invention. Further, as will be appreciated by those with skill in the art that each of the individual variations described and illustrated herein has discrete components and features which may be readily separated from or combined with the features of any of the other several embodiments without departing from the scope or spirit of the present inventions. All such modifications are intended to be within the scope of claims associated with this disclosure.

[0044] The invention includes methods that may be performed using the subject systems and devices. The methods may comprise the act of providing such a suitable device. Such provision may be performed by the end user. In other words, the “providing” act merely requires the end user obtain, access, approach, position, set-up, activate, power-up or otherwise act to provide the requisite device in the subject method. Methods recited herein may be carried out in any

order of the recited events which is logically possible, as well as in the recited order of events.

[0045] In addition, though the invention has been described in reference to several examples optionally incorporating various features, the invention is not to be limited to that which is described or indicated as contemplated with respect to each variation of the invention. Various changes may be made to the invention described and equivalents (whether recited herein or not included for the sake of some brevity) may be substituted without departing from the true spirit and scope of the invention. In addition, where a range of values is provided, it is understood that every intervening value, between the upper and lower limit of that range and any other stated or intervening value in that stated range, is encompassed within the invention.

[0046] Also, it is contemplated that any optional feature of the inventive variations described may be set forth and claimed independently, or in combination with any one or more of the features described herein. Reference to a singular item, includes the possibility that there are plural of the same items present. More specifically, as used herein and in claims associated hereto, the singular forms “a,” “an,” “said,” and “the” include plural referents unless the specifically stated otherwise. In other words, use of the articles allow for “at least one” of the subject item in the description above as well as claims associated with this disclosure. It is further noted that such claims may be drafted to exclude any optional element. As such, this statement is intended to serve as antecedent basis for use of such exclusive terminology as “solely,” “only” and the like in connection with the recitation of claim elements, or use of a “negative” limitation.

[0047] Without the use of such exclusive terminology, the term “comprising” in claims associated with this disclosure shall allow for the inclusion of any additional element—irrespective of whether a given number of elements are enumerated in such claims, or the addition of a feature could be regarded as transforming the nature of an element set forth in such claims. Except as specifically defined herein, all technical and scientific terms used herein are to be given as broad a commonly understood meaning as possible while maintaining claim validity.

[0048] The breadth of the present invention is not to be limited to the examples provided and/or the subject specification, but rather only by the scope of claim language associated with this disclosure.

1. A system for improving triathlon transition area efficiency, comprising:

- a. a main stand member comprising a base portion and a top portion, the base portion being configured to be supported by a ground surface; and
- b. a first shoe coupler fixedly coupled to the top portion of the main stand member and configured to removably couple a first shoe to the main stand member in a manner wherein a pose is established for the first shoe such that a foot of a standing athlete may be urged into the first shoe without the use of one or more hands of the athlete to stabilize the shoe.

2. The system of claim 1, wherein the base portion comprises a substantially straight elongate member.

3. The system of claim 2, wherein the base portion is oriented substantially perpendicularly relative to the ground surface.

4. The system of claim 1, wherein the base portion comprises an above-ground stand.

5. The system of claim 4, wherein the above-ground stand comprises three or more legs.

6. The system of claim 1, wherein the base portion comprises a ground-coupling feature configured to temporarily couple one end of the base portion to a ground portion below the ground surface.

7. The system of claim 6, wherein the ground-coupling feature comprises a sharpened end of the base portion configured to be forcibly driven into the ground portion below the ground surface.

8. The system of claim 6, wherein the ground-coupling feature comprises a substantially helical end fitting configured to be augered into the ground portion below the ground surface.

9. The system of claim 1, wherein the first shoe coupler comprises a two-sided clip biased to removably grasp a tongue of the shoe.

10. The system of claim 9, wherein the two-sided clip is configured to grasp the tongue to retain the pose of the first shoe until the foot of the standing athlete is urged into the shoe, thereby placing a separating force on the first shoe which causes the tongue to become uncoupled from the clip.

11. The system of claim 1, further comprising a second shoe coupler fixedly coupled to the top portion of the main stand member and configured to removably couple a second shoe to the main stand member in a manner wherein a pose is established for the second shoe such that a foot of a standing athlete may be urged into the second shoe without the use of one or more hands of the athlete to stabilize the second shoe.

12. The system of claim 11, wherein the first shoe coupler comprises a two-sided clip biased to removably grasp a tongue of the shoe.

13. The system of claim 12, wherein the two-sided clip is configured to grasp the tongue to retain the pose of the first shoe until the foot of the standing athlete is urged into the shoe, thereby placing a separating force on the first shoe which causes the tongue to become uncoupled from the clip.

14. The system of claim 11, further comprising a shoe alignment member removably coupling the first shoe to the second shoe to maintain spatial alignment of the shoes relative to each other.

15. The system of claim 1, further comprising a first shoe heel coupler member removably coupled between a heel of the first shoe and the main stand member to further stabilize and maintain the pose of the first shoe.

16. The system of claim 15, further comprising a second shoe heel coupler member removably coupled between a heel of the second shoe and the main stand member to further stabilize and maintain the pose of the second shoe.

17. The system of claim 1, wherein the top portion comprises a substantially straight elongate member.

18. The system of claim 1, wherein the top portion comprises a bike rack coupler fitting configured to be removably coupled to a nearby bicycle rack for additional stability of the main stand member in the triathlon transition area.

19. The system of claim 1, further comprising an accessory hook member coupled to the main stand member and configured to hold one or more triathlon accessory items.

20. The system of claim 19, wherein the one or more triathlon accessory items are selected from the group consisting of: a pair of goggles, a pair of sunglasses, a visor, a running hat, and a bicycle helmet.

21. The system of claim **1**, further comprising an accessory shelf coupled to the main stand member and configured to hold one or more triathlon accessory items.

22. The system of claim **21**, wherein the one or more triathlon accessory items are selected from the group consisting of: a pair of goggles, a pair of sunglasses, a visor, a running hat, and a bicycle helmet.

23. The system of claim **1**, further comprising a mirror coupled to the main stand member.

24. The system of claim **23**, wherein the mirror is movably coupled to the main stand member with one or more adjustable structures such that the mirror may be posed in a particular orientation by the athlete.

25. The system of claim **24**, wherein the one or more adjustable structures are selected from the group consisting of: a single joint; a multi-joint construct; and a bendable member.

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