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(54) **NOVEL DUAL GRIP STRAP APPARATUSES**

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ABSTRACT

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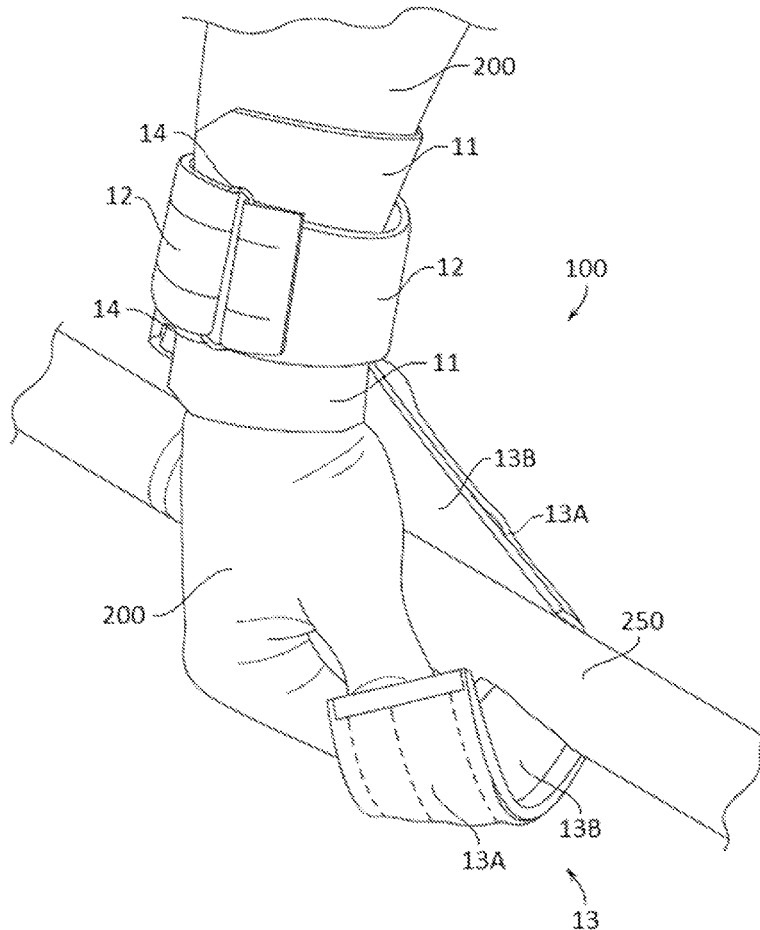
Related U.S. Application Data

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Publication Classification

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A63B 71/14 (2006.01)

Novel grip strap apparatuses capable of increasing the amount of weight a user can manipulate, while at the same time being constructed in such a manner as to prevent irritation to the hands and decrease sweat accumulation. In preferred embodiments, the grip strap apparatus comprises a wrist wrap which is made from closed cell rubber material and a dual grip strap. The dual grip strap may be two sided in nature, and comprise a first side made from a closed cell rubber material and a second side made from a natural or synthetic cloth material. In other embodiments, the dual grip strap may comprise a natural or synthetic cloth adjustment strap configured to secure the wrist wrap around the wrist and/or forearm of a user.



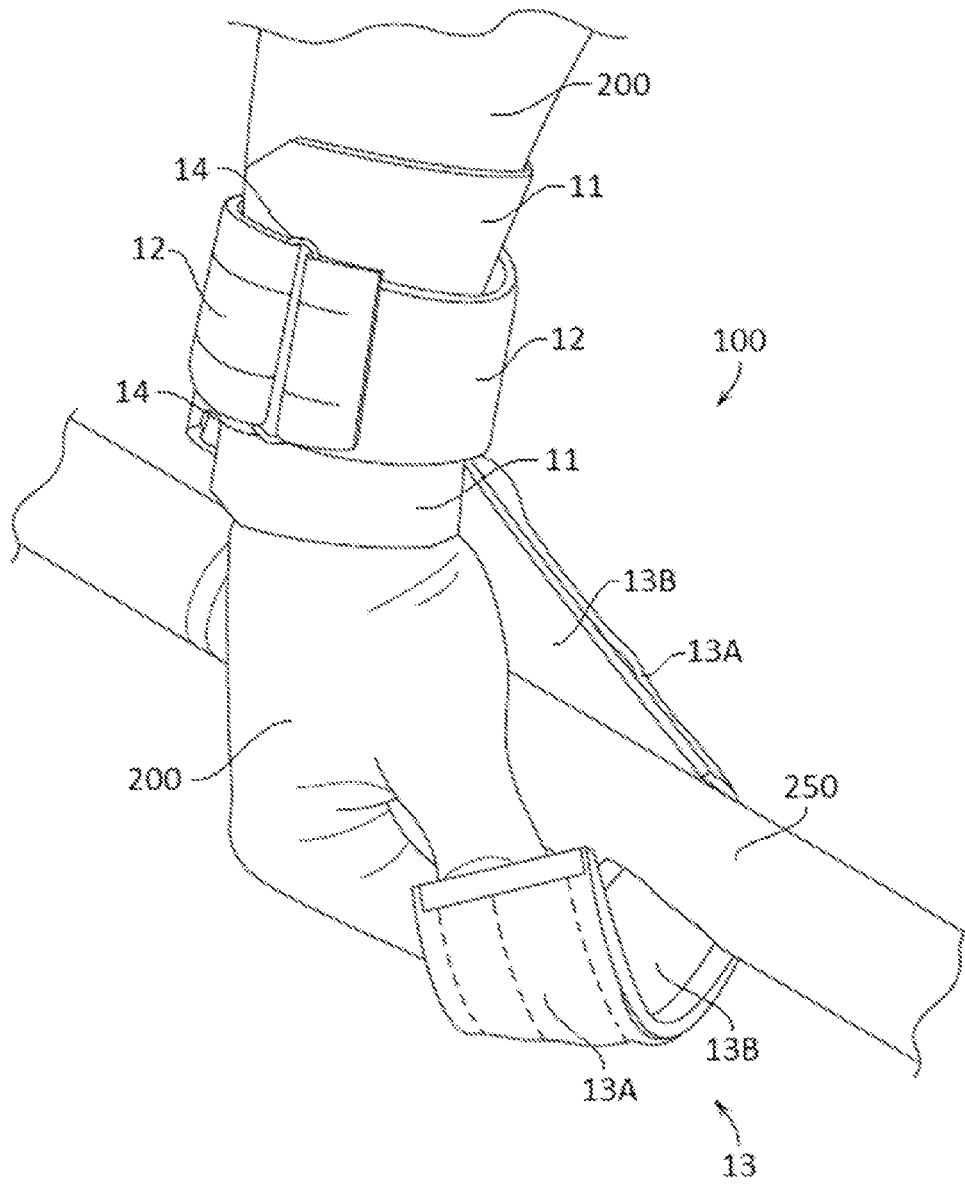


FIG. 1

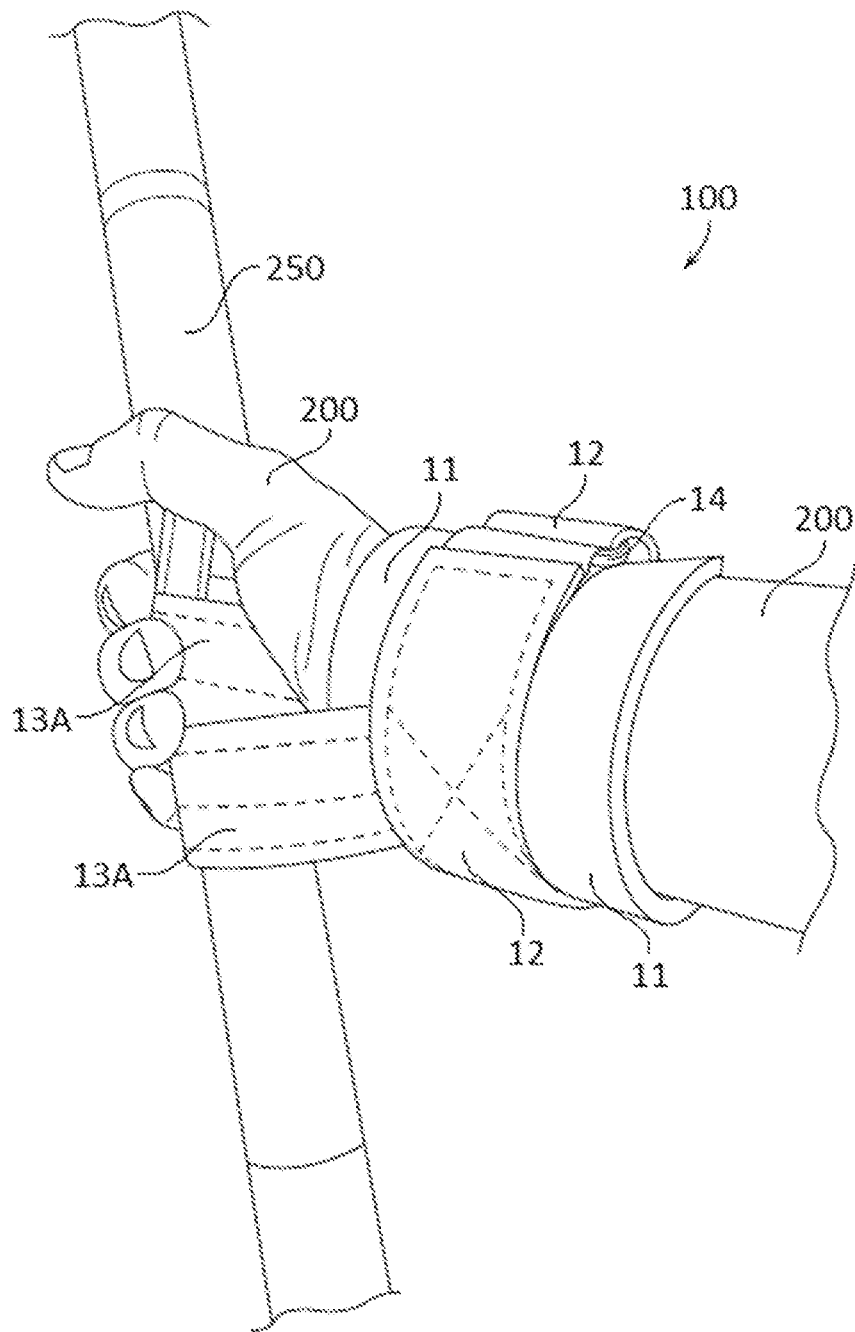


FIG. 2

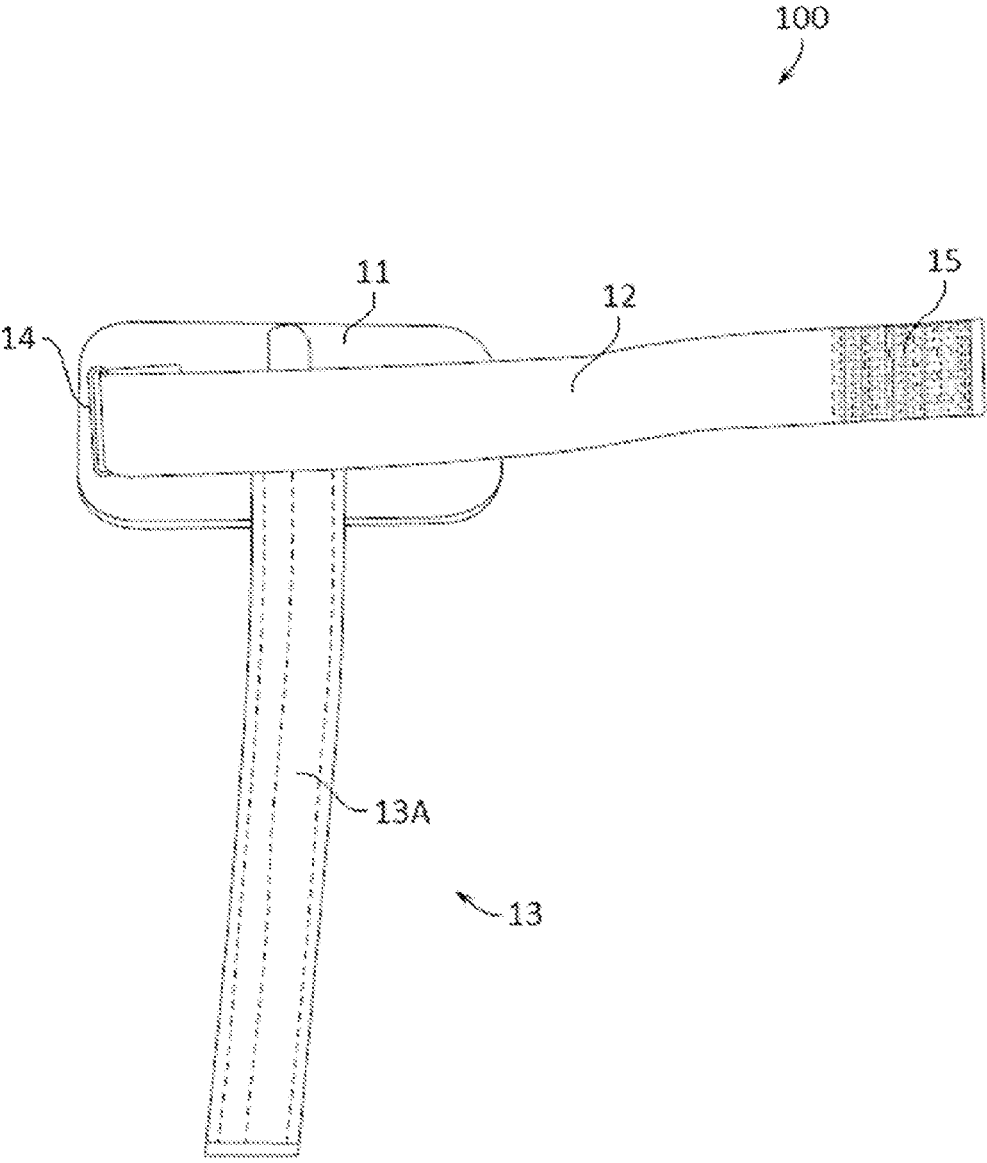


FIG. 3

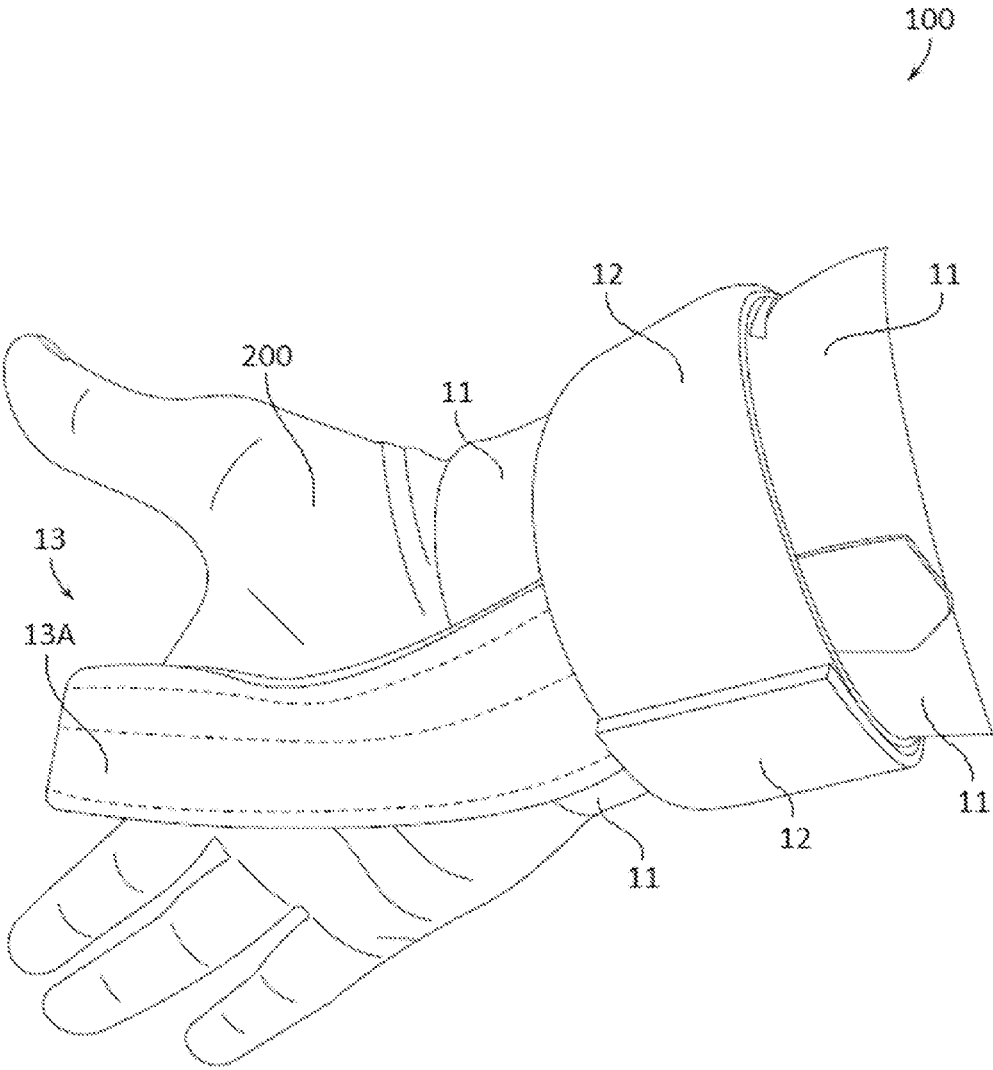


FIG. 4

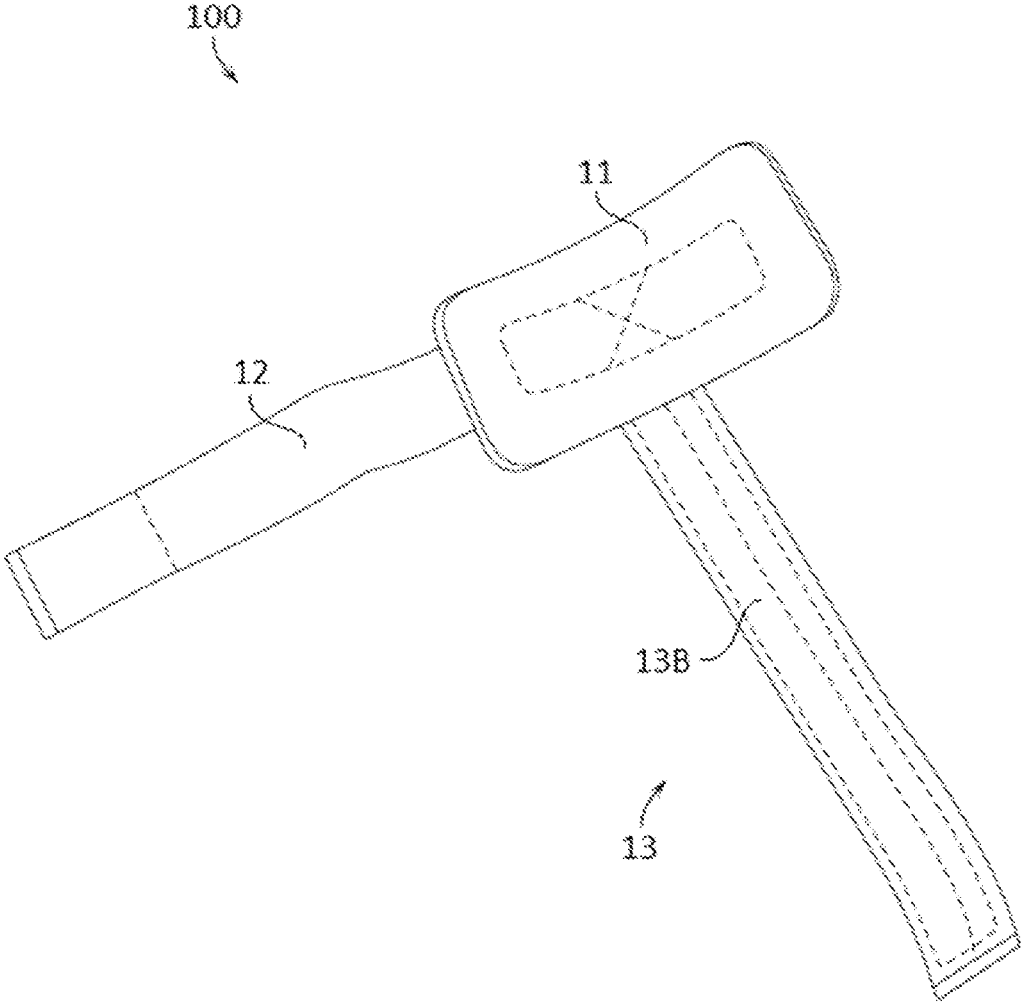


FIG. 5

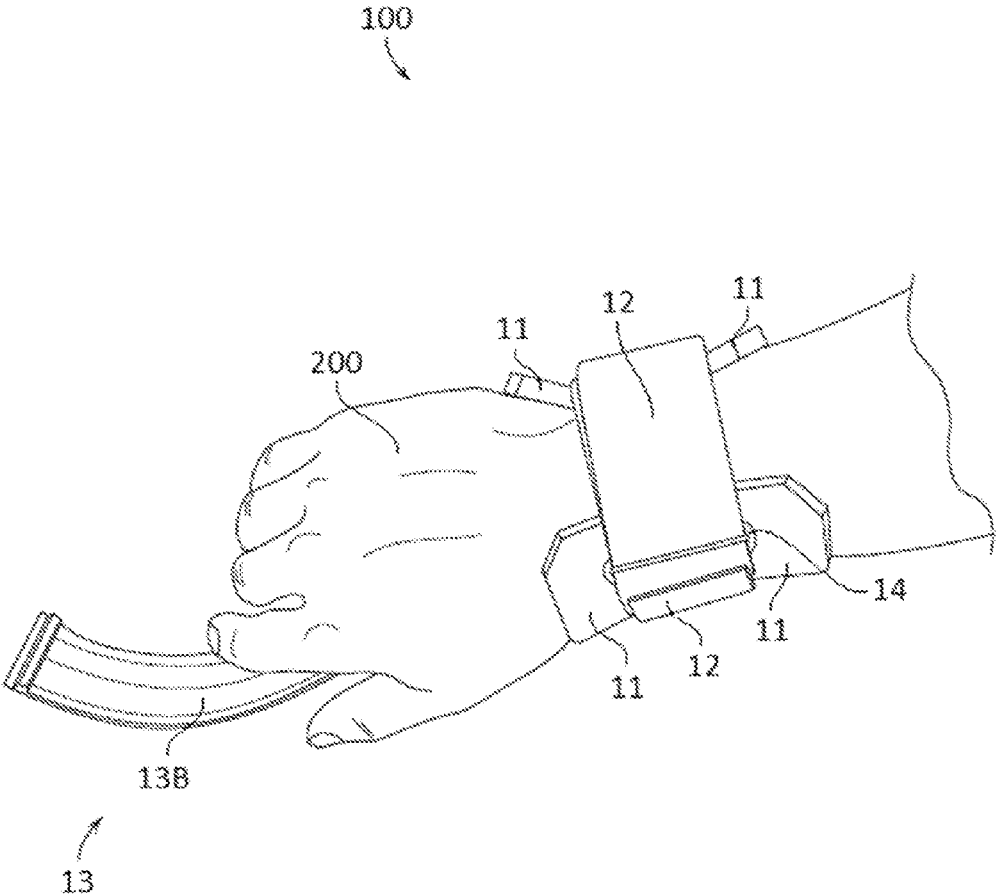


FIG. 6

NOVEL DUAL GRIP STRAP APPARATUSES

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority to, co-pending U.S. Provisional Patent Application No. 61/868,598 filed Aug. 22, 2013, and entitled “NOVEL DUAL GRIP STRAP DEVICES” the entire contents of the above-referenced patent application is incorporated by reference herein.

FIELD OF THE INVENTION

[0002] The present invention relates to novel grip enhancing devices and apparatuses for use with physical fitness training regimens. More particularly, the invention relates to a wrist mounted grip strap that facilitates the ability of the user to grip bar shaped physical fitness equipment and the like.

BACKGROUND

[0003] Physical fitness routines often incorporate the use of equipment that comprises a bar shaped gripping area for the hand of the user to grasp. Bar shaped gripping areas may be commonly found on dumbbells, barbells, kettlebells, weight bars, chin-up and pull-up bars, weight machines, and the like. Once the user securely grasps the bar shaped gripping area of the equipment, they are able to manipulate it and perform desired exercises.

[0004] It is very common for the main muscle groups of the chest, back, and shoulders, to accommodate more weight than the hands can comfortably grip. This results in limiting the maximum amount of weight to the amount that the hands can support, resulting in under utilization of the larger muscle groups and reduced muscle development.

[0005] In order to train the larger muscle groups with more weight than the hands can grasp, weight lifters resort to using grip enhancing methods. Grip straps are one such method. By attaching one end of a strap of material to the wrist and the other end to the bar shaped gripping area of the physical fitness equipment, the wrists are able to work in tandem with the hands to support the weight of the equipment.

[0006] Grip straps like the one described in U.S. Pat. No. 7,004,889 filed on Jun. 11, 2002 are common in the art. Due to the one piece design, these straps tend to fit poorly around the wrist and lead to pain, chaffing, and reduced weight lifting capacity. Other straps may utilize a substantially two piece design, with one section securing to the wrist and the other securing the wrist section to the equipment. Unfortunately, as with the one piece designs, these two piece systems tend to fit poorly around the section of the strap that attaches to the equipment, while the section of the strap that contacts the skin of the user is made from a durable material that is rough on the hands. The durable material usually wears on the hands to such an extent that many people require a separate set of gloves to protect their hands. Furthermore, the durable material that contacts the skin such as nylon or cotton, tends to accumulate sweat and bacterial build up.

[0007] Therefore, a need exists for a novel grip strap system and device capable of increasing the amount of weight a user can manipulate, while at the same time preventing irritation to the hands as is common with other straps known in the field.

BRIEF SUMMARY OF THE INVENTION

[0008] Novel grip strap apparatuses capable of increasing the amount of weight a user can manipulate, while at the same time being constructed in such a manner as to prevent irritation to the hands and decrease sweat accumulation. In preferred embodiments, the grip strap apparatus comprises a wrist wrap which is made from closed cell rubber material and a dual grip strap. The dual grip strap may be two sided in nature and comprise a first side made from a closed cell rubber material and a second side made from a natural or synthetic cloth material. In other embodiments, the dual grip strap may comprise a natural or synthetic cloth adjustment strap configured to secure the wrist wrap around the wrist and/or forearm of a user.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Some embodiments of the present invention are illustrated as an example and are not limited by the figures of the accompanying drawings, in which like references may indicate similar elements and in which:

[0010] FIG. 1—FIG. 1 depicts a rear perspective view of a user's hand and an example of a grip strap apparatus according to various embodiments described herein.

[0011] FIG. 2—FIG. 2 illustrates a front perspective view of a user's hand and an example of a grip strap apparatus according to various embodiments described herein.

[0012] FIG. 3—FIG. 3 shows a front elevation view of an example of a grip strap apparatus according to various embodiments described herein.

[0013] FIG. 4—FIG. 4 depicts a perspective view of the front of a user's hand and an example of a grip strap apparatus as worn for use, with the dual grip strap against the palm, ready to wrap around portions of an object according to various embodiments described herein.

[0014] FIG. 5—FIG. 5 illustrates a rear elevation view of an example of a grip strap apparatus according to various embodiments described herein.

[0015] FIG. 6—FIG. 6 shows an example of a grip strap apparatus as worn for use, from the back side of hand, with adjustment strap holding the wrist wrap around the wrist according to various embodiments described herein.

DETAILED DESCRIPTION OF THE INVENTION

[0016] The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the term “and/or” includes any and all combinations of one or more of the associated listed items. As used herein, the singular forms “a,” “an,” and “the” are intended to include the plural forms as well as the singular forms, unless the context clearly indicates otherwise. It will be further understood that the terms “comprises” and/or “comprising,” when used in this specification, specify the presence of stated features, steps, operations, elements, and/or members, but do not preclude the presence or addition of one or more other features, steps, operations, elements, members, and/or groups thereof.

[0017] Unless otherwise defined, all terms (including technical and scientific terms) used herein have the same meaning as commonly understood by one having ordinary skill in the art to which this invention belongs. It will be further understood that terms, such as those defined in commonly used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art

and the present disclosure and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

[0018] In describing the invention, it will be understood that a number of techniques and steps are disclosed. Each of these has individual benefit and each can also be used in conjunction with one or more, or in some cases all, of the other disclosed techniques. Accordingly, for the sake of clarity, this description will refrain from repeating every possible combination of the individual steps in an unnecessary fashion. Nevertheless, the specification and claims should be read with the understanding that such combinations are entirely within the scope of the invention and the claims.

[0019] New grip strap apparatuses for use with physical fitness equipment and workout routines are discussed herein. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details.

[0020] The present disclosure is to be considered as an exemplification of the invention, and is not intended to limit the invention to the specific embodiments illustrated by the figures or description below.

[0021] The present invention will now be described by referencing the appended figures representing preferred embodiments. FIG. 1 depicts a rear (back of hand) perspective view of a user's 200 hand and an example of a grip strap apparatus 100 (sometimes referred to as the "apparatus") according to various embodiments described herein. In this example, the grip strap apparatus 100 comprises a wrist wrap 11, an adjustment strap 12, and a dual grip strap 13. The wrist wrap 11 is joined to a dual grip strap 13 and to an adjustment strap 12.

[0022] The apparatus 100 is configured to aid a user 200 in gripping a plurality of objects such as a bar or rod shaped object 250, a weight lifting equipment bar, other bar or rod shaped equipment, or any other object that the dual grip strap 13 is able to contact or wrap around.

[0023] The wrist wrap 11 is configured to wrap around and contact a user's 200 wrist and/or forearm, while the adjustment strap 12 is configured to generally wrap around the wrist wrap 11 and the user's 200 wrist, thereby securing the apparatus 100 to the user 200.

[0024] The dual grip strap 13 substantially comprises two sides. In some embodiments, a first side 13A, or a portion of the first side 13A, may be made from closed cell rubber, while the other second side 13B, or a portion of the second side 13B, may be made from a natural or synthetic cloth such as woven cotton cloth, cotton webbing, woven nylon cloth, nylon webbing, polypropylene webbing, or any other suitable material of similar durability and flexibility. The first side 13A and second side 13B of the dual grip strap 13 may be made from two elongated lengths of different material which may be joined together to form one single dual grip strap 13 by stitching, chemical bonding, or other means. In the embodiments depicted in FIGS. 1-6, the wrist wrap 11, both the first side 13A and second side 13B of the dual grip strap 13, and the adjustment strap 12 are assembled together by stitching shown by example as dotted lines.

[0025] The dual grip strap 13 is attached to the wrist wrap 11 and configured so that the first side 13A of the dual grip strap 13 is in substantial contact with the skin or palm of the user 200, while the second side 13B is configured to substan-

tially make contact with the bar or rod shaped object 250. In preferred embodiments, the dual grip strap 13 comprises a first side 13A which comprises natural closed cell rubber and a second side 13B which comprises cotton cloth webbing.

[0026] FIG. 2 illustrates a front (palm side) perspective view of a user's hand 200 and an example of a grip strap apparatus 100 according to various embodiments described herein. In this illustration, the dual grip strap 13 is wrapped around a bar or rod shaped object 250 such as a weight lifting equipment bar. Portions of the second side 13B (FIGS. 1, 5 and 6) of the dual grip strap 13 are contacting the bar or rod shaped object 250 and as the dual grip strap 13 is wrapped around the bar or rod shaped object 250, portions of the second side 13B may also contact portions of the first side 13A of the dual grip strap 13. The user 200 is then able to grasp the dual grip strap 13 with the palm of the hand generally contacting the first side 13A, thereby aiding the user's 200 ability to grip and manipulate the bar or rod shaped object 250. Additionally, as the dual grip strap 13 is joined to the wrist wrap 11 which is secured to the wrist and/or forearm of the user 200 by the adjustment strap 12, the user 200 is provided further leverage by being able to use their wrist and/or forearm to aid in manipulating objects such as a bar or rod shaped object 250.

[0027] FIG. 3 shows a front elevation view of an example of a grip strap apparatus 100, while FIG. 4 depicts a perspective view of the front of a user's 200 hand and an example of a grip strap apparatus 100 as worn for use, with the dual grip strap 13 against the palm, ready to wrap around portions of an object according to various embodiments described herein. In these embodiments, the first side 13A of the dual grip strap 13 can be seen with portions of the second side 13B (FIGS. 1, 5, and 6) joined to the wrist wrap 11. The adjustment strap 12 can also be seen joined to the wrist wrap 11 and may optionally be joined to the dual grip strap 13 as well.

[0028] The adjustment strap 12 and the dual grip strap 13 are preferably joined to the wrist wrap 11, and optionally to each other, with stitching, chemical bonding, heat bonding, or by other suitable means. In some embodiments, the wrist wrap 11 may comprise a grommet 14 configured to accept the adjustment strap 12, and to prevent the adjustment strap 12 from tearing through the wrist wrap 11 during use. The grommet 14 may be made of metal, plastic, or other material common in the art.

[0029] The adjustment strap 12 comprises a temporary attachment means 15, which allows the adjustment strap 12 to secure to itself at many points, and therefore allows the tightening or loosening of the wrist wrap 11 around the wrist of the user 200. In preferred embodiments, a first end of the adjustment strap 12 is joined to the wrist wrap 11 and a second end of the adjustment strap 12 comprises a temporary attachment means 15. Suitable materials for the adjustment strap 12 may comprise natural or synthetic cloth such as woven cotton cloth, cotton webbing, woven nylon cloth, nylon webbing, polypropylene webbing, or any other cloth material of similar durability and flexibility common in the art. The temporary attachment means 15 may be a hook and loop type fastener such as Velcro®, a buckle type fastener, button type fastener or any other suitable temporary fastener which may be located anywhere on or along the adjustment strap 12. In preferred embodiments, the temporary attachment means 15 is a hook and loop type fastener.

[0030] The wrist wrap 11 and first side 13A of the dual grip strap 13 may be made of one type of closed cell natural and

synthetic rubber, or a combination of closed cell natural and synthetic materials such as NEO/EPT/SBR SCE-41 2A1, NEO/EPT/SBR SCE-42 2A2, NEO/EPT/SBR SCE-43 2A3, NEO/EPT/SBR SCE-41 2A1, NEO/EPT/SBR SCE-42 2A2, NEO/EPT/SBR SCE-43 2A3, NEO/EPT/SBR SCE-41 2A1, NEO/EPT/SBR SCE-42 2A2, NEO/EPT/SBR SCE-43 2A3, Neoprene SCE-41 2C1-E1, Neoprene SCE-42 2C2-E1, Neoprene SCE-43 2C3-E1, Neoprene SCE-45 2C5-E1, Neoprene SCE-42/43 2C2-3 E1, Neoprene SCE-41 2C1-E1, Neoprene SCE-41 2C1-E1, Nitrile SBE-42 2B2-E2, Nitrile SBE-43 2B3-E2, Epichlorohydrin SBE-41 2B1-E2, Epichlorohydrin SBE-42 2B2-E2, Epichlorohydrin SBE-43 2B3-E2, Epichlorohydrin SBE-43 2B3-E2, EPDM RE-41 2A1, EPDM RE-42 2A2, EPDM RE-43/44 2A3-4, EPT/PE/BTY RE-41 2A1, EPT/PE/BTY RE-42 2A2, PVC/NBR SBE-41/42 2B1-2, PVC/NBR SBE-41 2B1, PVC/NBR SBE-41/42 2B1-2, PVC/NBR SBE-41 2B1, SBR RE-42/43 2A2-3, NBR/PVC SBE-41 2B1, NBR/PVC SCE-41 2B1, NBR/PVC/NEO SCE-41 2B1, NBR/PVC/NEO SCE-42 2B2, NBR/PVC/NEO SCE-43 2B3, NBR/PVC, NBR/PVC SCE-41 2B1, Closed Cell Neoprene Sponge Rubber (100% Neoprene Sponge), Closed Cell Blended Sponge Rubber (Neoprene/EPDM/SBR Blend), Closed Cell EPDM Sponge Rubber, Closed Cell Nitrile (Buna-N) Sponge Rubber, Closed Cell ECH (Epichlorohydrin) Sponge Rubber, Closed Cell Viton® Sponge Rubber, PVC/NBR Sponge Rubber, or any other natural or synthetic closed cell rubber or foam common in the art. In preferred embodiments, the wrist wrap **11** is made from natural closed cell rubber, and the dual grip strap **13** comprises one surface of natural closed cell rubber. Not wishing to be limited by theory, the closed cell nature of the material comprising the wrist wrap **11** and dual grip strap **13** prevents adsorption of contaminants such as sweat and bacteria.

[0031] FIG. 5 illustrates a rear elevation view of an example of a grip strap apparatus **100**, while FIG. 6 shows an example of a grip strap apparatus **100** as worn for use, from the back side of a user's **200** hand, with the adjustment strap **12** holding the wrist wrap **11** around the wrist according to various embodiments described herein. In these embodiments, the second side **13B** of the dual grip strap **13** is visible. Preferably, the second side **13B** of the dual grip strap **13** may be made from natural materials such as cotton webbing or synthetic materials such as nylon webbing. By contacting and wrapping the second side **13B** of the dual grip strap **13** around an object such as a bar or rod shaped object **250** (FIGS. 1 and 2), the second side **13B** is configured to provide a non-slipping surface to for engaging objects the user **200** desires to manipulate.

[0032] Although the present invention has been illustrated and described herein with reference to preferred embodiments and specific examples thereof, it will be readily apparent to those of ordinary skill in the art that other embodiments and examples may perform similar functions and/or achieve like results. All such equivalent embodiments and examples are within the spirit and scope of the present invention, are contemplated thereby, and are intended to be covered by the following claims.

What is claimed is:

1. An apparatus for improving the grip of a user when engaging objects in a lifting motion, the apparatus comprising:

- a. a wrist wrap configured to wrap around a lower forearm and wrist of a user;

- b. an adjustment strap configured to secure the wrist wrap to the lower forearm and wrist of the user; and
 - c. an elongate grip strap secured to the apparatus, said grip strap comprising a first side constructed from a first material suitable for contacting a hand of the user and a second side constructed from a second material suitable for contacting the objects being lifted.
- 2.** The apparatus of claim **1** wherein the wrist wrap consists essentially of a material constructed from closed cell rubber.
- 3.** The apparatus of claim **1** wherein the first material comprises closed cell rubber.
- 4.** The apparatus of claim **1** wherein the second material comprises cloth.
- 5.** The apparatus of claim **4** wherein the second material further comprises cloth webbing.
- 6.** The apparatus of claim **1** wherein the adjustment strap comprises an attachment means.
- 7.** The apparatus of claim **6** wherein the attachment means is a hook and loop style fastener.
- 8.** The apparatus of claim **1** wherein the wrist wrap contains a grommet configured to accept portions of the adjustment strap.
- 9.** The apparatus of claim **2** wherein the first material comprises closed cell rubber.
- 10.** The apparatus of claim **9** wherein the second material comprises cloth.
- 11.** The apparatus of claim **10** wherein the second material further comprises cloth webbing.
- 12.** The apparatus of claim **11** wherein the adjustment strap comprises an attachment means.
- 13.** The apparatus of claim **12** wherein the attachment means is a hook and loop style fastener.
- 14.** The apparatus of claim **13** wherein the wrist wrap contains a grommet configured to accept portions of the adjustment strap.
- 15.** A system for increasing the grip of a user when lifting of objects such as dumbbells and weight bars; the system comprising:
- a. placing a wrist wrap around the lower forearm and wrist of a user;
 - b. wrapping an adjustment strap around the wrist wrap and lower forearm of the user;
 - c. securing the adjustment strap and the wrist wrap to the user using an attachment means;
 - d. wrapping a distal portion of an elongate grip strap secured to the wrist strap around a portion of the object so that a second side of the grip strap is contacting the object;
 - e. placing a first side of the elongate grip strap against the palm of the user; and
 - f. lifting the object in a lifting motion until a desired lifting motion is completed.
- 16.** The system of claim **15** wherein the first side of the elongate grip strap contains a first material consisting essentially of closed cell rubber.
- 17.** The system of claim **16** wherein the second side of the elongate grip strap contains a second material consisting essentially of cloth webbing.
- 18.** The system of claim **17** wherein the wrist wrap contains a wrist contacting surface material the wrist contacting surface material consisting essentially of closed cell rubber.
- 19.** The system of apparatus of claim **18** wherein the attachment means is a hook and loop style fastener.

20. The system of claim 19 wherein the wrist wrap contains a grommet configured to accept portions of the adjustment strap.

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