US 20180221738A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2018/0221738 A1**

Panozzo (43) **Pub. Date: Aug. 9, 2018**

(54) **ATHLETIC EQUIPMENT WEIGHT APPARATUS**

(71) Applicant: **Scott Panozzo**, San Antonio, TX (US)

(72) Inventor: **Scott Panozzo**, San Antonio, TX (US)

(21) Appl. No.: **15/890,030**

(22) Filed: **Feb. 6, 2018**

Related U.S. Application Data

(60) Provisional application No. 62/456,879, filed on Feb. 9, 2017.

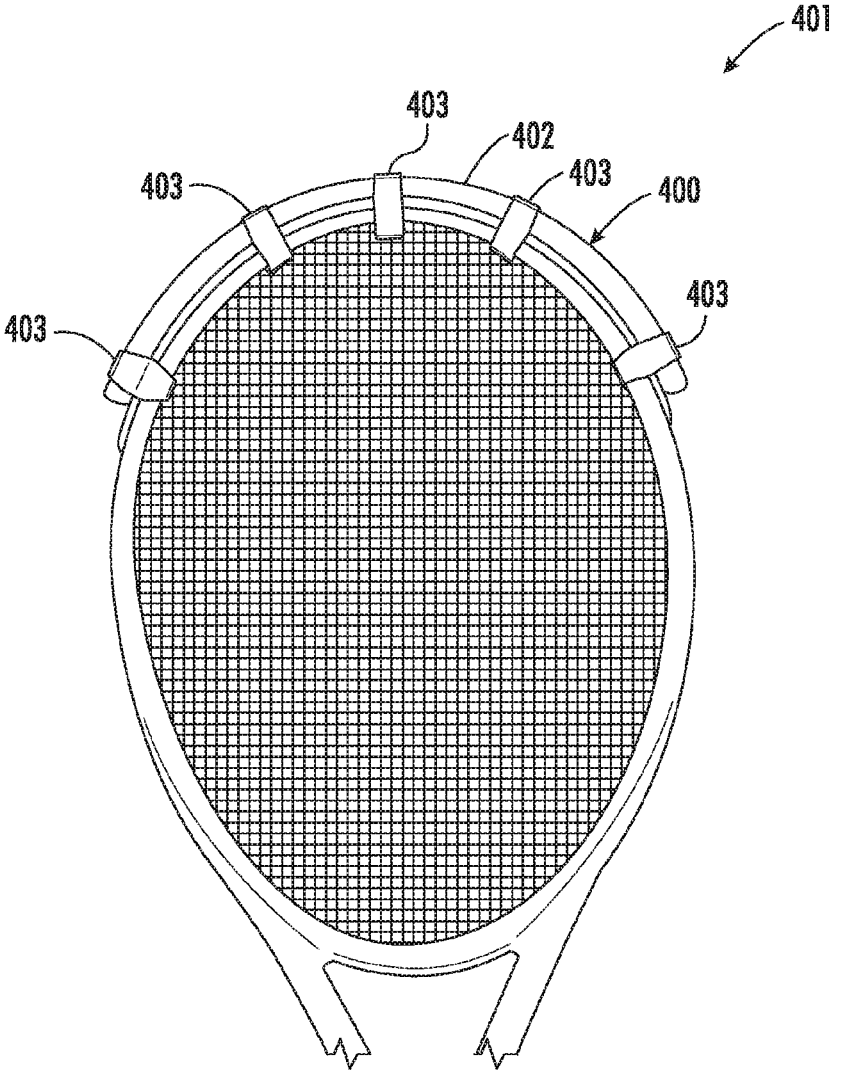
Publication Classification

(51) **Int. Cl.**
A63B 60/02 (2006.01)

(52) **U.S. Cl.**
CPC ***A63B 60/02*** (2015.10); *A63B 69/0024* (2013.01)

(57) **ABSTRACT**

A weight apparatus suitable for attaching to athletic equipment includes a flexible main body of a weight material, wherein the flexible main body is formed into a flattened strip that has a length along its y direction that is significantly greater than its width along its x direction, wherein the flexible main body is configured to be malleable to conform in a curved manner to wrap along a head of a sporting racket and around a handle of a hockey stick.



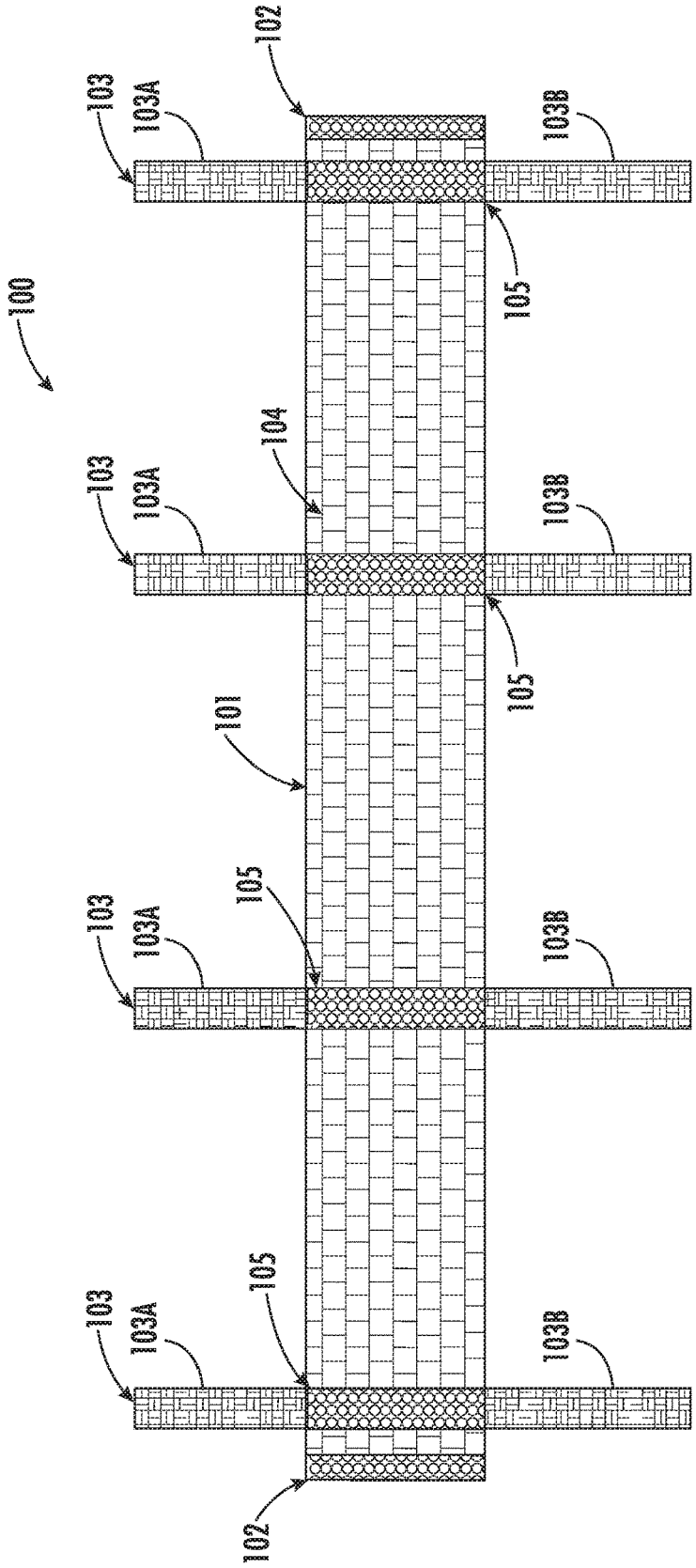

100
101
102
102
103
103A
103B
103
103A
103B
103
103A
103B
103
103A
103B
104
105
105
105
105

FIG. 1

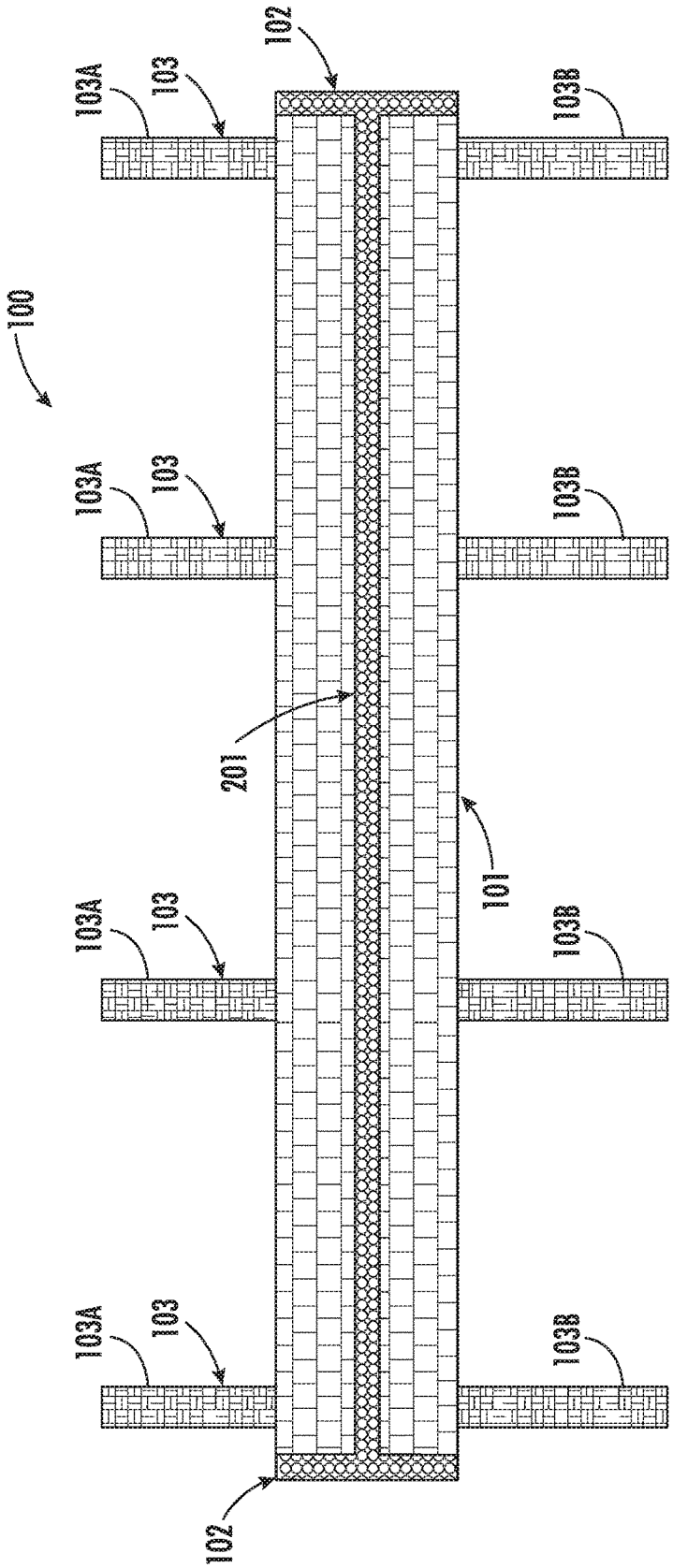


FIG. 2

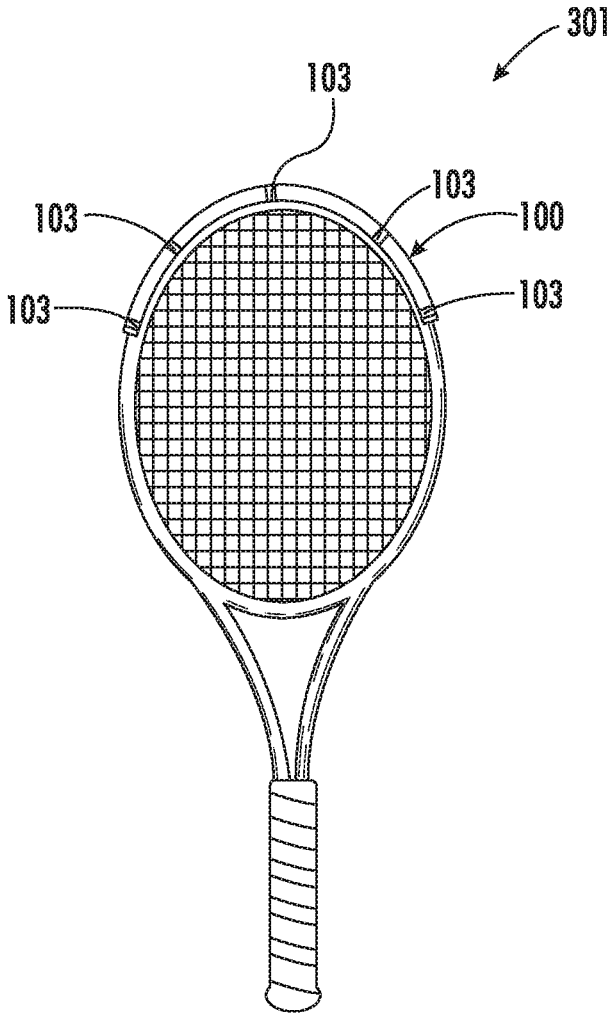


FIG. 3

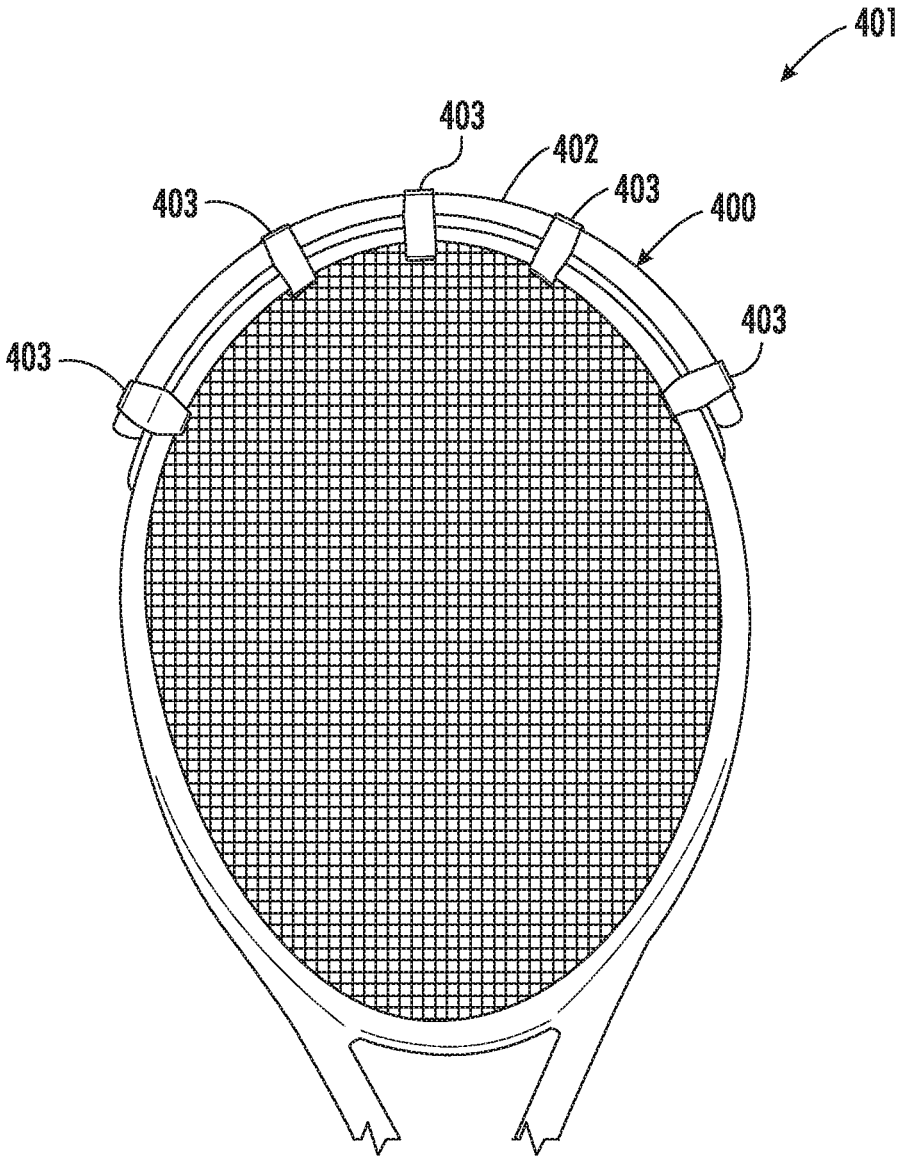


FIG. 4

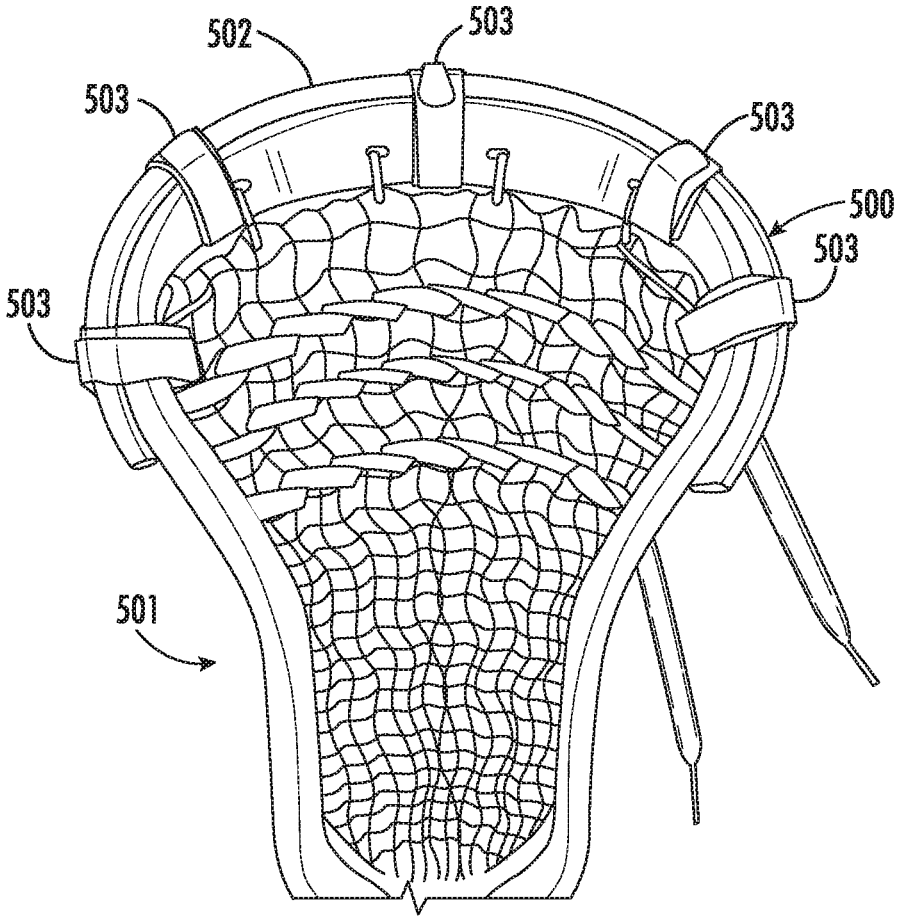


FIG. 5A

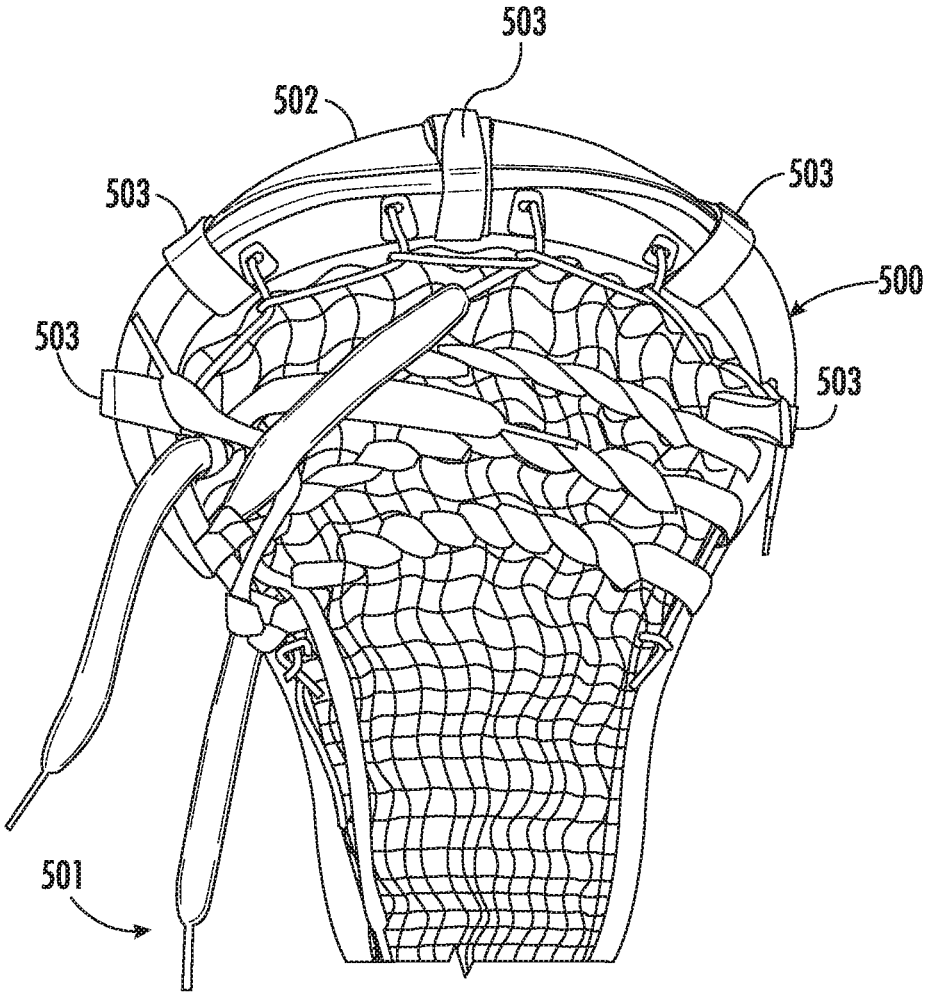


FIG. 5B

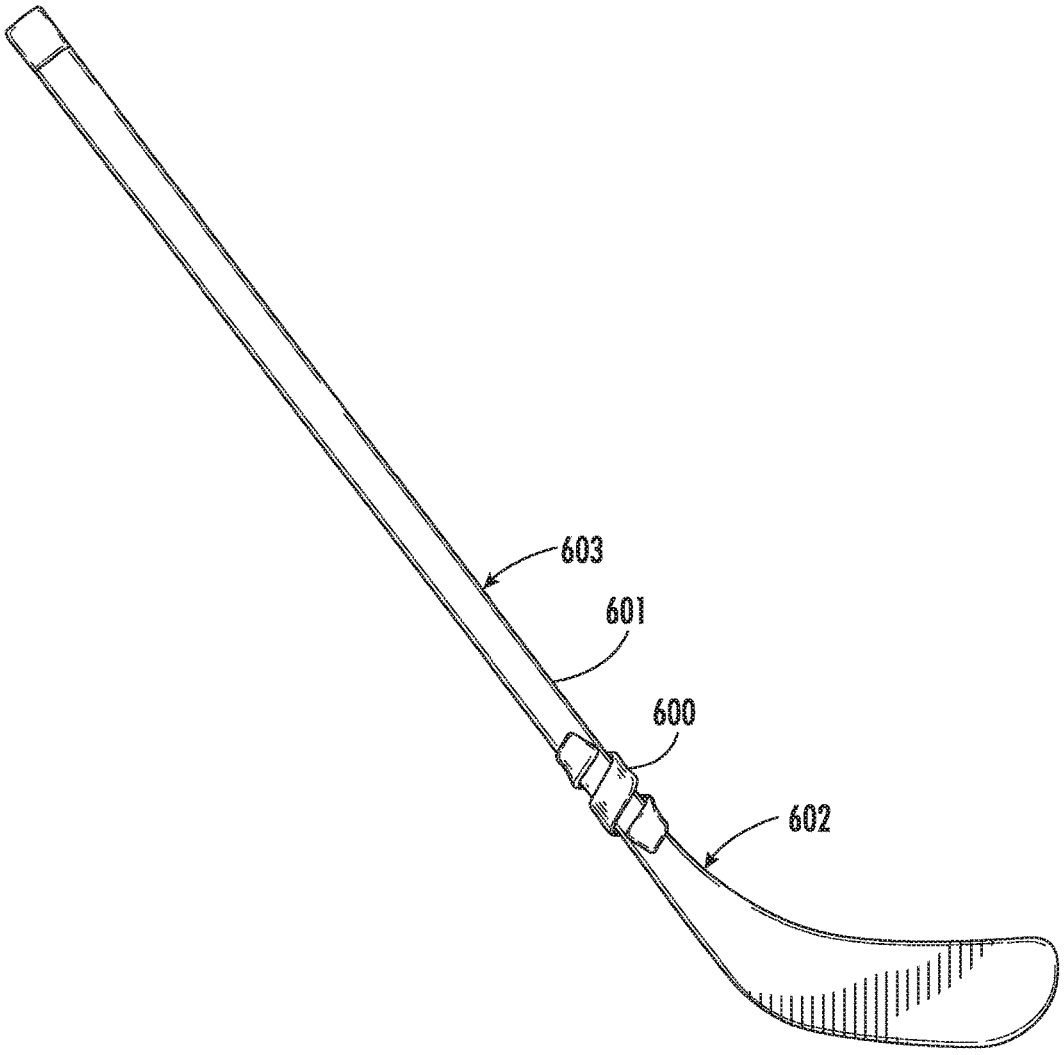


FIG. 6

ATHLETIC EQUIPMENT WEIGHT APPARATUS

[0001] This application claims priority to U.S. provisional patent application Ser. No. 62/456,879, which is hereby incorporated by reference herein.

TECHNICAL FIELD

[0002] The present invention relates in general to athletic equipment, and more particularly, to a weighted apparatus for attaching, in a detachable manner, to athletic equipment.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] FIG. **1** illustrates a top view of a weight apparatus configured in accordance with embodiments of the present invention;

[0004] FIG. **2** illustrates a bottom view of the weight apparatus of FIG. **1**;

[0005] FIG. **3** illustrates a sports racket with a weight apparatus installed thereon in accordance with embodiments of the present invention;

[0006] FIG. **4** illustrates a portion of a sports racket with a weight apparatus installed thereon in accordance with embodiments of the present invention;

[0007] FIG. **5**A illustrates a front view of a portion of a lacrosse stick with a weight apparatus installed thereon in accordance with embodiments of the present invention; and

[0008] FIG. **5**B illustrates a back view of a portion of the lacrosse stick of FIG. **5**A with a weight apparatus installed thereon in accordance with embodiments of the present invention; and

[0009] FIG. **6** illustrates a hockey stick with a weight apparatus installed thereon in accordance with embodiments of the present invention.

DETAILED DESCRIPTION

[0010] While these exemplary embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, it should be understood that other embodiments may be realized and that various changes to the invention may be made without departing from the spirit and scope of the present invention. Thus, the following more detailed description is not intended to limit the scope of the invention, as claimed, but is presented for purposes of illustration only to describe the features and characteristics of embodiments of the present invention to sufficiently enable one skilled in the art to practice the invention.

[0011] In describing and claiming embodiments of the present invention, the following terminology will be used.

[0012] The singular forms "a," "an," and "the" include plural referents unless the context clearly dictates otherwise.

[0013] As used herein, "adjacent" refers to the proximity of two structures or elements. Particularly, elements that are identified as being "adjacent" may be either abutting or connected. Such elements may also be near or close to each other without necessarily contacting each other. The exact degree of proximity may in some cases depend on the specific context.

[0014] As used herein, the term "and/or" when used in the context of a listing of entities, refers to the entities being present singly or in combination. Thus, for example, the phrase "A, B, C, and/or D" includes A, B, C, and D individually, but also includes any and all combinations and subcombinations of A, B, C, and D.

[0015] As used herein, a plurality of items, structural elements, compositional elements, and/or materials may be presented in a common list for convenience. However, these lists should be construed as though each member of the list is individually identified as a separate and unique member. Thus, no individual member of such list should be construed as a defacto equivalent of any other member of the same list solely based on their presentation in a common group without indications to the contrary.

[0016] Embodiments of the present invention provide an attachable and detachable weighted apparatus, which may be installed on or attached to various types of athletic equipment for strength training and development and enhancement of various movements of the equipment by a user. The athletic equipment may be for use in any sport that makes use of rackets. Racket sports are games in which players use rackets to hit a ball or other object, including, but not limited to, Badminton, Ball badminton, Basque pelota, Frontenis, Xare, Beach tennis, Matkot, Padel, Paleta Frontón, Pelota mixteca, Pickleball, Platform tennis, Qianball, Racketlon, Racquetball, Racquets, Real tennis, Soft tennis, Speed-ball, Speedminton, Squash, Hardball squash, Squash tennis, Stické, Table tennis, Tennis, and Tennis polo. Additionally, the athletic equipment may be for use in any sport that makes use of sticks, including, but not limited to, lacrosse, cricket, and hockey sticks, and any other athletic equipment that requires manipulation by the user during an athletic endeavor. Further, the weight apparatus may be installed on such athletic equipment to assist in the rehabilitation of the user's hands, arms, shoulders, back, etc. due to an injury.

[0017] Embodiments of the present invention are designed to enhance an athlete's power performance on the court, field, and ice. Embodiments of the present invention provide a weight apparatus with a low profile design that easily and securely attaches to a sports racket and/or stick to allow the athlete to increase strength and stamina, increase racket and stick speed, build explosive velocity on shots, gain greater control and accuracy, and gain flexibility lost through weight lifting.

[0018] Embodiments of the present invention enable an athlete to use their natural movements (e.g., tennis, lacrosse, hockey, etc.) with a full range of motion while training or practicing. Embodiments of the present invention engage the exact muscles a player uses in tandem naturally and organically, increasing the physical demand through the element of resistance. Through the element of resistance brings a greater demand on the level of effort, therefore increasing the player's power performance.

[0019] FIG. **1** illustrates a top view of a weight apparatus **100** configured in accordance with certain embodiments of the present invention, while FIG. **2** illustrates a bottom view of the weight apparatus **100**. The main body **101** of the weight apparatus **100** may comprise one or more enclosed chambers comprising a flexible material, such as cloth or Neoprene. Each of the one or more chambers may enclose a filler material **104** (not actually shown in FIGS. **1-2** for reasons of simplicity), such as grains of sand, iron particles, or any equivalent material capable of adding mass (i.e., weight) to the apparatus **100**. Moreover, a user may utilize a plurality of such weight apparatuses **100**, where each is

filled with a different amount of the filler material **104** so that each apparatus **100** has a different mass/weight than the other(s).

[0020] The ends **102** of the main body **101** may be enclosed by some sort of stitching **102** to ensure that the filler material **104** does not escape from within the one or more chambers of the main body **101**. Alternatively, one or more of the ends **102** may be comprised of a hook and loop type of fastening material to permit the user to alter the amount of filler material **104** within the one or more chambers of the main body **101**.

[0021] As shown in FIG. **2**, the one or more chambers of the main body **101** may be formed by wrapping the flexible material into a cylinder for forming the one or more chambers of the main body **101**, and attaching together the longitudinal ends of the flexible material with stitching **201**.

[0022] Attached to the main body **101** are pluralities of strips **103** of hook and loop fasteners. The strips **103** may be attached to the main body **101** by stitching **105**, or any other equivalent means.

[0023] Each strip **103** may have a first end **103**A comprising a hook material and a second end **103**B comprising a loop material configured in a manner so that when the main body **101** is installed on a piece of athletic equipment (e.g., see FIGS. **3**-**5**B), the ends of each strip **103** are joined together so that the hook and loop features fasten together. Alternatively, the strips **103** may comprise any other type of means for fastening one end **103**A of the strip **103** to the other end **103**B when the main body **101** is installed on a piece of athletic equipment.

[0024] As illustrated in the non-limiting example of FIG. **3**, the weight apparatus **100** may be installed on a top portion of a head of a racket **301**. Depending on the length of the weight apparatus **100**, the plurality of fastening strips **103** are then looped around the frame of the head and through the strings of the racket **301** securing the weight apparatus **100** to the racket **301**.

[0025] The user of the racket **301** is then able to swing the weighted sports racket in any manner desired in order to strengthen the various muscles and joints of the user's arm and/or for therapeutic reasons associated with the rehabilitation of any injuries. Because of the inherent strength of the fastening of the ends of the strips to each other, the weight apparatus **100** will not detach itself from the racket **301** during such movements by the user. Moreover, if desired, the user may additionally utilize the weighted racket **301** while hitting balls or shuttlecocks, as the case may be.

[0026] Referring next to the non-limiting example of FIG. **4**, there is illustrated a sports racket **401** with a weight apparatus **400** installed thereon in a manner as similarly illustrated in FIG. **3**, wherein the weight apparatus **400** is configured in accordance with embodiments of the present invention. The weight apparatus **400** is configured from a solid material, which can be manually shaped at least in a limited manner to conform to the shape of a portion of the athletic equipment on which it is installed. In accordance with embodiments of the present invention, such a solid material is an elongated piece of a high density material (e.g., lead), which may be coated with a plastic coating (e.g., a Plastisol PVC coating or rubber). The elongated piece may be formed as flattened strips. As such, the weight apparatus **400** may have a form of a flattened strip that has a length along its y direction that is significantly greater than its width along its x direction. Note that any other malleable solid material may be utilized instead of lead, and which has a sufficient density to impart weight to the portion of the athletic equipment on which it is installed.

[0027] The weight apparatus **400** may be installed on the athletic equipment using any suitable means, such as with a plurality of hook and loop fasteners **403**. In the illustration of FIG. **4**, the weight apparatus **400** is installed on the top of the sports racket **401**. For example, the weight apparatus **400** can be laid on a flat hard surface and pressed flat. Then, the top of a sports racket **401** can be placed adjacent to and on top of the weight apparatus **400**, and the weight apparatus then manually conformed to the shape of the top of the sports racket **401**. The hook and loop fasteners **403** can then be threaded through the strings and around the weight apparatus **400** and the frame of the sports racket **401** and fastened together to secure the weight apparatus **400** adjacent to the head of the sports racket **401**.

[0028] With respect to other sports, such as lacrosse, the weight apparatus **100**, **400** may be installed on an end of the stick. For example, the non-limiting illustrations in FIGS. **5**A and **5**B show how a weight apparatus **500** (which may be similarly configured as the weight apparatuses **100**, **400**) can be installed on an end of a lacrosse stick **501** with a plurality of hook and loop fasteners **503** after the malleable weight apparatus **500** is manually conformed to the shape of the portion of the lacrosse stick **501** (e.g., an outer edge of the basket) on which it is installed.

[0029] Referring next to FIG. **6**, there is illustrated a non-limiting example of an installation of a weight apparatus **600** (which may be similarly configured as the weight apparatuses **100**, **400**, **500**) to a portion of the handle **601** of a hockey (e.g., field or ice) stick **603**. As shown in FIG. **6**, hook and loop fasteners are not necessary to install the weight apparatus **600** to the hockey stick **603**, but instead the weight apparatus **600** can be twisted around the handle **601** of the hockey stick **603** without any other means for attaching the weight apparatus **600** to the hockey stick **603**. When the weight apparatus **600** is twisted in such a manner around the handle **601** adjacent to where the handle **601** of a hockey stick **603** conjoins with the blade **602**, it will not slip off when the user performs typical hockey stick movements because the handle **601** of a typical hockey stick **603** widens as it conjoins with the blade **602**. Nevertheless, in accordance with alternative embodiments of the present invention, such hook and loop fasteners can be utilized for attaching the weight apparatus **600** to the hockey stick **603**.

[0030] An advantage of embodiments of the present invention over prior art weight apparatuses is that the same weight apparatus can be installed on sports rackets such as illustrated in FIG. **4**, other athletic equipment such as a lacrosse stick as illustrated in FIGS. **5**A and **5**B, and on a hockey stick such as illustrated in FIG. **6**.

1. A weight apparatus suitable for attaching to athletic equipment, comprising a flexible main body comprising a weight material, wherein the flexible main body is formed into a flattened strip that has a length along its y direction that is significantly greater than its width along its x direction, wherein the flexible main body is configured to be malleable to conform in a curved manner to wrap along a head of a sports racket and around a handle of a hockey stick.

2. The weight apparatus as recited in claim **1**, wherein the flexible main body is configured to be malleable to conform in a curved manner to wrap along a basket of a lacrosse stick.

3. The weight apparatus as recited in claim **2**, wherein the flexible main body further comprises a plastic or rubber outer coating completely enclosing the weight material.

4. The weight apparatus as recited in claim **3**, wherein the weight material comprises lead.

5. The weight apparatus as recited in claim **3**, wherein the weight material comprises a material having a mass similar to lead.

6. The weight apparatus as recited in claim **1**, further comprising one or more hook and loop fastening strips configured to attach the flexible main body to the head of the sports racket.

7. The weight apparatus as recited in claim **1**, wherein the flexible main body is configured to be malleable to twist around a handle of a hockey stick.

8. The weight apparatus as recited in claim **1**, wherein the flexible main body is configured to be malleable to twist around a handle of a hockey stick without any other means for attaching the weight apparatus to the hockey stick.

9. A weight apparatus suitable for attaching to athletic equipment, comprising:

a flexible main body comprising a weight material, wherein the flexible main body is formed into a flattened strip that has a length along its y direction that is significantly greater than its width along its x direction, wherein the flexible main body is configured to be malleable to conform in a curved manner to wrap along a portion of an athletic device; and

one or more hook and loop fastening strips configured to attach the flexible main body to the athletic device.

10. The weight apparatus as recited in claim **9**, wherein the flexible main body further comprises a plastic or rubber outer coating completely enclosing the weight material.

11. The weight apparatus as recited in claim **10**, wherein the weight material comprises lead.

12. The weight apparatus as recited in claim **10**, wherein the weight material comprises a material having a mass similar to lead.

13. The weight apparatus as recited in claim **9**, wherein the athletic device is a sports racket, wherein the weight apparatus is attached to a curved head of the sports racket with the one or more hook and loop fastening strips.

14. The weight apparatus as recited in claim **9**, wherein the athletic device is a lacrosse stick, wherein the weight apparatus is attached to a curved head of the lacrosse stick with the one or more hook and loop fastening strips.

15. The weight apparatus as recited in claim **9**, wherein the athletic device is a hockey stick, wherein the weight apparatus is attached to a handle of the hockey stick adjacent to the blade of the hockey stick by wrapping the main body around the handle.

16. The weight apparatus as recited in claim **13**, wherein the athletic device is a hockey stick, wherein the weight apparatus is attached to a handle of the hockey stick adjacent to the blade of the hockey stick by wrapping the main body around the handle.

17. The weight apparatus as recited in claim **13**, wherein the athletic device is a lacrosse stick, wherein the weight apparatus is attached to a curved head of the lacrosse stick with the one or more hook and loop fastening strips.

18. The weight apparatus as recited in claim **14**, wherein the weight apparatus is attached to a handle of the athletic device by wrapping the main body around the handle.

19. The weight apparatus as recited in claim **17**, wherein the athletic device is a hockey stick, wherein the weight apparatus is attached to a handle of the hockey stick adjacent to the blade of the hockey stick by wrapping the main body around the handle.

20. The weight apparatus as recited in claim **19**, wherein the flexible main body is configured to be malleable to twist around the handle of the hockey stick without any other means for attaching the weight apparatus to the hockey stick.

* * * * *