A kettlebell exercise device is disclosed herein having, in one embodiment a standardized core section having a handle and one or more facets to which are attached weighted facet plates. The core section may optionally comprise a cavity to which a weighted insert may be secured. The improved kettlebells of the present invention allow for increased manufacturing efficiencies, reduced manufacturing costs and reduced downtime to produce a series of kettlebell exercise devices of varying overall weights.
EXERCISE EQUIPMENT AND EXERCISE EQUIPMENT SYSTEMS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 60/140,412, filed Aug. 23, 2007.

FIELD OF THE INVENTION

[0002] The present invention relates to exercise equipment and exercise equipment systems, and more particularly to kettlebells and kettlebell systems.

BACKGROUND OF THE INVENTION

[0003] The present invention relates to exercise equipment and exercise equipment systems utilizing weight resistance. In particular the present invention relates to exercise equipment commonly referred to as kettlebells. Kettlebells have been in use for over one hundred years to provide aerobic exercise as part of a strength training and fitness regimen. Kettlebells of the type typically known in the art consist of a handle attached to a spherical portion, with a flattened base for stability when placed on surface when not in use. Kettlebells are typically made of a cast metal, such as iron. The handles may be integrally cast with the bottom portion, or otherwise affixed to a previously cast bottom portion.

[0004] Exercises incorporating kettlebells of the type known in the art require the user to lift the kettlebell from a fixed position on the floor to a resting position on the top of the user’s shoulder, and/or cradled between the front of the user’s shoulder, chest, and upper and lower arm. From this resting position, the user then lifts the kettlebell above his or her head, and returns the kettlebell to the resting position. This particular fitness routine is known as the “jerk.” In addition to the jerk, other kettlebell-based fitness routines include the single and double handed swing, clean, clean and press, and the snatch.

[0005] Strength training and fitness regimens of the type known in the art typically require the use of multiple kettlebells, each one having a different weight, and therefore providing a different level of resistance. Each of these differently weighted kettlebells are typically created from unique molds, with unique specifications and performance characteristics, including weight, size, shape, and the like.

[0006] However, the manufacturing practices required to create this variety of kettlebells is not without its deficiencies. Problems with making different kettlebells with different degrees of resistance include the high cost of the unique molds utilized in their construction, as well as a lack of manufacturing efficiency as a result of downtime as processes switch from using one set of molds to another.

[0007] Another problem with current kettlebell designs is that their shape pays little attention to increasing the comfort of, and reducing the probability of injuries to the kettlebell user that may result from repetitive use and misuse.

[0008] Accordingly, it is an object of the present invention to develop exercise equipment and exercise equipment systems that obviate these problems.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] While the specification concludes with claims which particularly point out and distinctly claim the present invention, it is believed that the present invention will be better understood from the following description of preferred embodiments, taken in conjunction with the accompanying drawings, in which like reference numerals identify identical elements and wherein:

[0010] FIGS. 1 and 2 depict front and side elevations, respectively, of kettlebells of the type known in the prior art.

[0011] FIGS. 3a-3d depict various elevations of a kettlebell base design of the present invention that provides recessed portions for receiving parts of the user’s body.

[0012] FIGS. 4a-4d depict various elevations of a kettlebell incorporating a handle design of the present invention.

[0013] FIGS. 5a and 5b depict various elevations of kettlebell design of the present invention comprising facet plates.

[0014] FIGS. 6a and 6b depict various elevations of kettlebell design of the present invention comprising facet plates, in conjunction with core inserts.

[0015] FIGS. 7a and 7b depict cross sectional views of kettlebells of the present invention capable of receiving inserts.

[0016] FIGS. 8a and 8b depict cross sectional views of another kettlebell of the present invention capable of receiving inserts.

DETAILED DESCRIPTION OF THE INVENTION

[0017] As a user becomes accustomed to certain kettlebell performance characteristics they develop certain expectations and responses during a fitness routine, based on how the kettlebell is expected to feel during each stage. Though the performance characteristics of a kettlebell (with a first weight, shape and/or center of gravity) will change from a first fitness routine to a second fitness routine (with a second, weight, shape and/or center of gravity), the user will still expect to experience the first performance characteristics during the second fitness routine. As a result, the user’s body may be out of a preferred alignment for the second set of performance characteristics, thereby increasing the probability of injury as the user attempts, in mid-routine, to compensate between the actual performance characteristics and the expected performance characteristics.

[0018] The present inventors have discovered that consistency between the overall shape and/or center of gravity of a kettlebell, form one fitness routine to the next, even with varying levels of resistance resulting from increased kettlebell weight, can increase the users level of comfort, and reduce the probability of user injury. Accordingly it is an object of the present invention to provide a kettlebell design that allows for a varying degree of resistance, with a consistent set of performance characteristics from one configuration to another.

[0019] Referring now to the drawings, and more particularly to FIGS. 1 and 2, there is shown a kettlebell (100) known in the prior art. Kettlebell (100) consists of a substantially spherical lower portion (110) with a flattened base portion (112). Kettlebell (100) further contains a handle (115), where the vertical portions of handle (115) are bent to approximately ninety degrees, relative to the horizontal portion of handle (115). Kettlebell handles of this design are particularly easy to manufacture, but suffer several deficiencies related to user comfort and injury prevention.

[0020] Referring to FIGS. 3a-3d, there are shown various elevations of a kettlebell according to the present invention (300), comprising a lower portion (310) with a flattened base portion (312), and a handle portion (315). The inventors of the present invention have discovered that kettlebells adapted to
receive the wrist and forearm as they are aligned during various stages of a lifting routine substantially increase the user’s comfort during such lifting routine, as well as reinforcing the proper alignment of the wrist and forearm to reduce the probability of user injury. FIGS. 3a-3d show a kettlebell of the present invention (300) where the lower portion (310) comprises recess zones (330, 331, 335, 336, 340, 341, 345, 346). Though four recess zones are depicted on each side of kettlebell (300), for a total of 8 recess zones, it is contemplated by the present inventors that from one to N recess zones may be incorporated into kettlebell 300. In one embodiment of the present invention kettlebell (300) has in the range of from about 1 to about 40 recess zones. In another embodiment kettlebell (300) has in the range of from about 3 to about 15 recess zones. In yet another embodiment the range is from about 5 to about 12 recess zones.

[0022] The preferred number, shape and degree of concavity of the recess zones will depend on a variety of factors, including, but not limited to the following: the preferred alignment of the user’s body during the various stages of the fitness routine, the shape of the user’s upper arm, forearm, hand and wrist; any constraints on the user’s range of motion resulting from previous injuries or medical instructions; cost; manufacturing feasibility, and the like. It is understood by the present inventors that the recess zones need not have a uniform slope, shape and/or concavity throughout the entirety of the zone.

[0023] It will be understood by one of ordinary skill in the art upon reading the disclosure herein that the purpose of all recess zones need not be to accept and secure a portion of the user’s body, but that some recess zones may be designed to accept a portion of the user’s body and better facilitate its movement to another recess zone during some stage or stages of the fitness routine. For example, Recess zone 330 is intended to accept user’s forearm (not shown) during a stage of the fitness routine, and direct it to recess zones 335, 340 and 345 during a subsequent stage of the fitness routine.

[0024] The recess zones may be integrally formed during the production of lower portion 310 (e.g., incorporated into one or more forms used as part of a casting/formation process), or may be created subsequent to production of lower portion 310 (e.g., removing material through some sort of grinding and/or routing process).

[0025] Referring to FIGS. 4a-4d, there is shown various elevations of the handle portion (315) and the lower portion (310) of a kettlebell according to the present invention (300). The present inventors have discovered that a preferred technique for securing a kettlebell during a routine is to interlock one’s thumb and pointer finger together around handle (315) such that the user’s thumb/nail is exerting pressure on the underside of the tip of the pointer finger. To best accomplish the preferred technique for securing a kettlebell during a fitness routine, the present inventors have found an optimum outside, uncompressed diameter for handle (315) (i.e., the length of a line drawn between points (442) and (444) of FIG. 4c; the length of a line drawn between points (400) and (402); (410) and (408); (406) and (412); (416) and (420); and (414) and (418) of FIG. 3c; the length of a line drawn between points (446) and (448) of FIG. 4d) is in the range of from about 25 mm to about 40 mm. In one embodiment of the present invention the range is from about 30 mm to about 35 mm. In another embodiment of the present invention the range is from about 32 mm to about 34 mm. In yet another embodiment the outside, uncompressed diameter is 33 mm. As used herein the term outside, uncompressed diameter refers to the outside diameter of handle (315), which may include a compressible substance, such as foam, vinyl, and the like, over the uncompressed portion of handle (315), prior to the application of a compressive force to the compressible substance.

[0026] In addition to the outside, uncompressed handle diameter, handles of the present invention will have an outside width (i.e., the length of a line, between points (410) and (412), drawn parallel to the X-axis) in the range of from about 150 mm to about 250 mm. In one embodiment of the present invention the outside handle width is in the range of from about 160 mm to about 200 mm. In another embodiment it is in the range of from about 170 mm to about 190 mm. In yet another embodiment it is in the range of from about 180 mm to about 190 mm.

[0027] Handle (315) will have a handle interior height (i.e., the length of a line between points marked (402) and (404), drawn parallel to the Y-axis) in the range of from about 40 mm to about 80 mm. In one embodiment of the present invention the handle interior height is in the range of from about 50 mm to about 70 mm. In another embodiment the range is from about 55 mm to about 65 mm. Handle (315) will have a handle interior width (i.e., the length of a line between points marked (408) and (406), drawn parallel to the X-axis) in the range of from about 75 mm to about 150 mm. In one embodiment of the present invention the handle interior width is in the range of from about 90 mm to about 130 mm. In another embodiment the range is from about 100 mm to about 120 mm.

[0028] In one embodiment of the present invention the kettlebell lower portion has a total lower portion height (i.e., the length of a line between points 404 and 422, drawn parallel to the Y-axis) in the range of from about 100 mm to about 250 mm. In another embodiment the range is from about 120 mm to about 200 mm. In yet another embodiment the range is from about 140 mm to about 160 mm. In yet another embodiment the range is from about 150 mm to about 160 mm.

[0029] In one embodiment of the present invention the total over all kettlebell height (i.e., the length of a line between points 400 and 422, drawn parallel to the Y-axis) in the range of from about 100 mm to about 400 mm. In another embodiment the range is from about 150 mm to about 300 mm. In yet another embodiment the range is from about 180 mm to about 280 mm. In yet another embodiment the range is from about 250 mm to about 275 mm.

[0030] In one embodiment of the present invention the kettlebell lower portion width (i.e., the length of a line between points 420 and 424, drawn parallel to the X-axis) in the range of from about 100 mm to about 400 mm. In another embodiment the range is from about 150 mm to about 300 mm. In yet another embodiment the range is from about 180 mm to about 280 mm. In yet another embodiment the range is from about 200 mm to about 220 mm.

[0031] As used herein the term “gripping portion” of said handle shall be defined as that portion of the handle identified by the region extending from the line between points (408)
and (410), through the area containing the line between points (400) and (402), to the line between points (406) and (412).

[0032] Handle (315) of the present invention will, at the points indicated at 426 and 428 will have a curve measuring in the range of from about 10 degrees to about 20 degrees. In another embodiment the angle will be in the range of from about 11 degrees to about 15 degrees. In yet another embodiment of the present invention the range for the angle located at points 426 and 428 will be in the range of form about 11 degrees to about 13 degrees.

[0033] Handle (315) of the present invention will, at the points indicated at 460 and 462 will have a curve measuring in the range of from about 30 degrees to about 45 degrees. In another embodiment the angle will be in the range of from about 34 degrees to about 40 degrees. In yet another embodiment of the present invention the range for the angle located at points 460 and 462 will be in the range of form about 37 degrees to about 39 degrees.

[0034] Kettlebell handles with curve measurements in the range of from about X to about Y will better facilitate the ability of the user to maintain control of kettlebell (300) as a fixed point kettlebell handle (315) moves relative to a fixed point on user’s hand throughout a fitness routine. Handle designs of the present invention have also been found to dramatically increase user comfort during a fitness routine.

[0035] Referring to FIGS. 5a-5c, there is shown various elevations of a kettlebell according to the present invention (300) which comprises a core portion (505), which itself comprises handle (315); and facet plates (508) and (510), which are connected to core (505). Traditional methods for the manufacture of a series of kettlebells of different weights include casting the kettlebells in iron, in a unique mold created for each of the different kettlebells in a series. This approach to kettlebell manufacture requires significant investment in the development, storage and maintenance of each of the unique molds for each of the different kettlebells. This approach also suffers from significant manufacturing inefficiencies as production must either: (i) be halted in order to switch over to a separate unique mold to manufacture a different kettlebell; or, (ii) set up multiple manufacturing lines to simultaneously manufacture multiple kettlebell versions. The present invention, in contrast, can create a series of differently weighted kettlebells by utilizing a standardized core section (505), which includes handle (315), and facet plates (508) and (510), which are connected to core (505) at a core facet (520) and (522). Core section (505) may have from about 1 to N facets for receiving a corresponding number of facet plates. In one embodiment of the present invention the core section has from about 2 to about 20 facets. In another embodiment of the present invention the core has from about 2 to about 10 facets. In yet another embodiment the core has form about 2 to about 4 facets. In yet another embodiment the core has 2 facets for receiving a corresponding number of facet plates.

[0036] Core section (505), including handle portion (315), may be made from a variety of materials, including metals; metal alloys; ceramics; polymers; organic materials, such as wood; and heterogeneous and/or homogenous combinations thereof. Handle (315) may integrally formed as part of the core section manufacturing process, or may be attached as part of a subsequent manufacturing step.

[0037] The total weight of a kettlebell of the present invention is equal to the total weight of the core section, including any inserts, plus the total weight of the facet plates. To create a series of kettlebells of varying weights according to the present invention a standardized core section, with a fixed or standardized weight, would be combined with a series of facet plates of variable weight, such that the total weight of the components equals the desired weight necessary to provide the intended degree of resistance during a fitness routine. The exact dimensions of core section (505) will depend on a variety of factors, including, but not limited to: The material(s) from which core (505) are to be made; the density of such material(s); the total intended weight and dimensions of the kettlebell, and the weight and physical specifications of the other components in the kettlebell, including the facet plates and any inserts.

[0038] Core (505) may be formed as a single unit, or by combining a series of components or subassemblies. In one embodiment of the present invention core (505) is made of cast iron and formed by combining to separate castings.

[0039] Referring to FIGS. 6a-6c, there is shown another embodiment of the present invention where core section (505) includes cavity (610) capable of receiving insert (630). The opening to cavity (610) is located on facets (522) and (520), though it is contemplated that kettlebell cores with multiple facets need not have more than one cavity opening. The opening to cavity (610) are covered, and thereby securing any insert (630) that may be contained within, by affixing facet plate (508) and (510) to facets (520) and (522), respectively. Referring to FIG. 6a, there is shown one embodiment of the present invention where facets (520) and (522) are located on what are commonly referred to as the front and back (i.e., parallel with the handle) of core section (505), and cavity (610) runs substantially parallel to handle (315) through core (505).

[0040] Referring to FIG. 6b, there is shown another embodiment of the present invention where facets (620) and (622) are located on what are commonly referred to as the sides (i.e., perpendicular to the handle) of core section (505), and cavity (610) runs substantially parallel to handle (315) through core (505).

[0041] Cavity (610) may be integrally formed as part of the manufacturing process(es) that create core (505), or may be created through one or more subsequent steps (e.g., drilling/boring, melting, and the like).

[0042] Referring to FIG. 6c, there is shown an embodiment of the present invention where a cavity plug (640) is affixed to facet plates (635) and (637). Cavity plug (640) may be integrally formed as part of the facet plate, or may be separately manufactured and affixed to the facet plate via a variety of mechanical, chemical, or magnetic processes. In one embodiment of the present invention cavity plug (640) is separately formed and affixed to the facet plate via adhesives. In yet another embodiment cavity plug (640) comprises a threaded protrusion that can be mated with a correspondingly threaded recess in the facet plate.

[0043] Cavity plug (640) can be secured within the opening of cavity (610) via a variety of mechanical, chemical, or magnetic processes. In one embodiment of the present invention the outside diameter of cavity plug (640) is substantially equal to the inside diameter of cavity (610), such that once inserted, cavity plug (640) may be secured within the opening of cavity (610) by frictional forces. In another embodiment the outside diameter of a combination of cavity plug (640) and another material (e.g., a compressible material such as
rubber, vinyl, foam, and the like) is substantially equal to the inside diameter of cavity (610), such that once asserted cavity plug (640) may be secured within the opening of cavity (610) by frictional forces. In another embodiment the outside diameter of cavity plug (640) is less than the inside diameter of the opening of cavity (610), but its position within cavity (610) is maintained by the fact that plug (640) is securely affixed to a facet plate, and such facet plate is securely affixed to the facet of core (505).

[0044] Insert (630) may be manufactured from a variety of materials, including metals, metal alloys, ceramics, polymers, and mixtures thereof. Insert (630) may be solid (either being one material throughout, or a heterogeneous or homogeneous mixture of materials), or may itself contain a cavity capable of receiving materials such that the total weight of insert (630) may vary depending on the amount of such materials contained within. Any cavity within insert (630) may be integrally formed as part of the manufacturing process(es) that create insert (630), or may be created through one or more subsequent steps (e.g., drilling/boring, melting, and the like). 

[0045] Insert (630) may take the form of any three dimensional shape, including but not limited to cylindrical, rectangular, cubic, star-shaped. The opening of cavity (610) will have a geometry capable of receiving the geometric form of insert (630), though it is contemplated that the volume of insert (630) may be smaller than volume of cavity (610) such that there be gaps between the surface of insert (630) and the surface of cavity (610). Insert (630) and cavity (610) may have a continuous geometry, or may have a variable geometry across its dimensions. Insert (630) may run the entire length of cavity (610), or may have a length less than the length of cavity (610).

[0046] Facet plates may be made from a variety of materials, including metals; metal alloys; ceramics; polymers; organic materials, such as wood; and heterogeneous and/or homogeneous combinations thereof. The facet plates may be substantially solid throughout, or may themselves have a cavity contained within for receiving a volume of material to vary the total weight of the facet plate. Such a cavity may be integrally formed as part of the facet plate formation process, or may be formed as part of one or more subsequent manufacturing steps (e.g., drilling, boring, melting, and the like). The facet plate may be formed as a single unit, with or without a cavity, or may be formed by assembling two or more components or subassemblies. Facet plates may be connected to the facets of the kettlebell by a variety of mechanisms, including, but not limited to: mechanical, chemical, and magnetic.

[0047] The exact dimensions of the facet plates will depend on a variety of factors, including the material(s) selected from which the facet plates will be formed, the density of such material(s), the total intended weight of the kettlebell, and the weight and physical specifications of the other components in the kettlebell, including the core section, any inserts, and any other facet plates. In one embodiment of the present invention the weight and/or size of the facet plates of kettlebells having more than one facet plate are substantially identical. In another embodiment the facet plates of kettlebells having more than one facet plate are made of different materials (or combinations of materials), such that the weight, but not the other physical characteristics of the facet plates is substantially identical. In yet another embodiment of the present invention the weight and/or size of at least two facet plates of kettlebells having more at three or more facet plates are substantially identical. In yet another embodiment the weight of all facet plates of kettlebells having more than one facet plate are different, though their other physical characteristics may be the same (i.e., size and shape).

[0048] Referring to FIGS. 7a and 7b, there is shown another embodiment of the present invention where the lower portion of kettlebell (300), with handle (315), comprises a cavity (704) formed by cavity wall (706). Cavity wall (706) may also be the exterior wall of the kettlebell's lower portion, or may be contained within another cavity formed by the exterior wall of the kettlebell's lower portion. Cavity (704) is capable of receiving insert (750), and the opening to cavity (704) is covered by cavity cover plate (708). Cavity cover plate (708) may also be the exterior base of the kettlebell's lower portion, or may itself be contained within another cavity. Insert (750) may be attached to cavity cover plate (708) by a variety of means, including, but not limited to mechanical, chemical, magnetic.

[0049] Cavity (704) may be integrally formed as part of the manufacturing process(es) that create the kettlebell's lower portion, or may be created through one or more subsequent steps (e.g., drilling/boring, melting, and the like). Insert (750) may take the form of any three dimensional shape, including but not limited to cylindrical, rectangular, cubic, star-shaped. The opening of cavity (704) will have a geometry capable of receiving the geometric form of insert (750), though it is contemplated that the volume of insert (750) may be smaller than volume of cavity (704) such that there may be gaps between the surface of insert (750) and the surface of cavity (704). Insert (750) and cavity (704) may have a continuous geometry, or may have a variable geometry across its dimensions. The exact dimensions of the insert (750) will depend on a variety of factors, including the material(s) selected from which insert (750) will be formed, the density of such material(s), the total intended weight of the kettlebell, and the weight and physical specifications of the other components in the kettlebell, including the core section, any other inserts, and any other facet plates.

[0050] Insert (750) may be manufactured from a variety of materials, including metals, metal alloys, ceramics, polymers, and mixtures thereof. Insert (750) may be solid (either being one material throughout, or a heterogeneous or homogeneous mixture of materials), or may itself contain a cavity capable of receiving materials such that the total weight of insert (750) may vary depending on the amount of such materials contained within. Any cavity within insert (750) may be integrally formed as part of the manufacturing process(es) that create insert (750), or may be created through one or more subsequent steps (e.g., drilling/boring, melting, and the like).

[0051] Referring to FIGS. 8a and 8b, there is shown another embodiment of the present invention similar to that described in connection with FIGS. 7a and 7b, where the lower portion of kettlebell (300), with handle (315), comprises a cavity (704) formed by cavity wall (806). Cavity wall (806) is capable of receiving the upper portion (810) of insert (750). The exact dimensions of the cavity wall (806) where it receives the upper portion of insert (750) will depend on the geometry and dimensions of insert (750). In one embodiment of the present invention insert (750) has a substantially cylindrical geometry, with a substantially flat upper portion (810). Where cavity wall (806) meets upper portion (810) of insert (750), cavity wall (806) is also substantially flat. Insert (750) may be secured within cavity (704) by fastening it to cavity
plate (708), and/or by fastening it to cavity wall (806) where upper portion (810) or insert (750) communicates with cavity wall (806).

[0052] It will be understood by one of ordinary skill in the art upon reading the disclosure contained herein that the kettlebells of the present invention may comprise a variety of the elements described herein. In one embodiment of the present invention a kettlebell is comprised of a core section, two facet plates connected to facets located on the core section, and a series of recess zones that span both the core section and the facet plates. In another embodiment of the present invention a kettlebell is comprised of a core section, two facet plates connected to facets located on the core section, a series of recess zone that span both the core section and the facet plates, and a handle of the type described herein.

[0053] In yet another embodiment of the present invention a kettlebell is comprised of a core section with a cavity, two facet plates connected to facets located on the core section, a series of recess zones that span both the core section and the facet plates, and a handle of the type described herein. This kettlebell further comprises an insert.

[0054] In yet another embodiment of the present invention a kettlebell is comprised of a handle and a lower portion with a cavity, a series of recess zones on the lower portion of the kettlebell, and a handle of the type described herein. This kettlebell further comprises an insert located within the cavity. In yet another embodiment of the present invention a kettlebell is comprised of a lower portion with a cavity, a series of recess zones on the lower portion of the kettlebell, and a handle of the type described herein. This kettlebell further comprises an insert located within the cavity, the cavity wall is also the exterior of the kettlebell, and the cavity opening is covered by a cavity cover plate that is the exterior base of the kettlebell, wherein the insert is affixed via welding to the interior surface of the cavity cover plate. In yet another embodiment of the present invention the insert is affixed via welding to the interior surface of the cavity cover plate as well as the interior surface of the cavity wall.

[0055] In another embodiment of the present invention at least a portion of the kettlebell is covered with a compressible and/or partially-compressible material, such as rubber, vinyl, foam, and the like, including combinations thereof. Such coverings have the ability to absorb at least a portion of any forces that may be exerted upon the kettlebell, or may be exerted upon a user by the kettlebell.

[0056] In another embodiment of the present invention a kettlebell exercising system kit is provided that comprises a kettlebell core with a handle, wherein the core comprises a cavity capable of receiving a weighted insert and at least one facet for receiving a facet plate, where said facet plate is capable of being removed and reattached to access the cavity within the core. The kit will also contain a series of differently weighted, interchangeable inserts that may be inserted into and removed from the cavity to change the overall weight of the kettlebell during a fitness routine.

[0057] The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension and/or range value is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as “40 mm” is intended to mean “about 40 mm.”

[0058] Having now described several embodiments of the present invention it should be clear to those skilled in the art that the forgoing is illustrative only and not limiting, having been presented only by way of exemplification. Numerous other embodiments and modifications are contemplated as falling within the scope of the present invention as defined by the appended claims thereto.

[0059] While particular embodiments of the present invention have been illustrated and described, it would be obvious to one of ordinary skill in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

1. A kettlebell exercising device comprising:
   a. A kettlebell core, wherein said kettlebell core comprises:
      i. A handle,
      ii. At least one facet for receiving a facet plate,
   b. Said facet plate and,
   wherein said kettlebell exercising device has a substantially flattened base and a cavity located within said kettlebell core, wherein said cavity is capable of receiving a weighted insert.
   2. (canceled)
   3. The kettlebell exercising device of claim 1 further comprising said weighted insert.
   4. The kettlebell exercising device of claim 1 further comprising in the range of from about 1 to about 20 recess zones.
   5. The kettlebell exercising device of claim 4 further comprising in the range of from about 4 to about 16 recess zones.
   6. The kettlebell exercising device of claim 4 wherein at least one of said recess zones spans across said facet plate and said kettlebell core.
   7. The kettlebell exercising device of claim 3 further comprising in the range of from about 1 to about 20 recess zones.
   8. (canceled)
   9. (canceled)
   10. A kettlebell exercising device comprising:
       a. A handle;
       b. A lower kettlebell portion, wherein said lower kettlebell portion comprises from about 1 to about 20 recess zones;
       c. A cavity formed within said lower kettlebell portion capable of receiving a weighted insert, wherein said cavity has a cavity wall and a cavity opening;
       d. A cavity cover plate;
       e. Said weighted insert and,
       wherein said cavity wall is also the exterior of the lower kettlebell portion, and said handle is attached to said lower kettlebell portion along said exterior of the lower kettlebell portion, and wherein said weighted insert is affixed to the interior surface of said cavity cover plate, and said cavity cover plate is attached to said cavity wall.
   11. The kettlebell exercising device of claim 10 wherein said weighted insert is additionally attached to the interior of said cavity wall.
   12. The kettlebell exercising device of claim 10 further comprising in the range of from about 2 to about 16 recess zones.
   13. The kettlebell exercising device of claim 12 further comprising in the range of from about 4 to about 16 recess zones.
   14. A kettlebell exercising device comprising a handle, wherein the gripping portion of said handle is substantially free of a compressible material, and the midpoint of the gripping portion of said handle has an outside, uncompressed diameter in the range of from about 25 mm to about 45 mm.
15. The kettlebell exercising devise of claim 14 wherein the midpoint of the gripping portion of said handle further comprises an outside, uncompressed diameter in the range of from about 32 mm to about 34 mm.

16. (canceled)

17. The kettlebell exercising device of claim 10 wherein substantially all but the gripping portion of said handle is coated in a compressible material.

18. (canceled)

19. (canceled)

20. (canceled)

21. A kettlebell exercising device comprising a kettlebell core, wherein said kettlebell core comprises:
   i. a handle, wherein said handle has a gripping portion with an outside, uncompressed diameter in the range of from about 25 mm to about 45 mm at the midpoint of said gripping portion;
   ii. a substantially flattened base; and,
   iii. from about 6 to about 12 recess zones.

22. The kettlebell exercising device of claim 21 further comprising at least one facet plate.

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