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(54) **KETTLEBELL**

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(57) **ABSTRACT**

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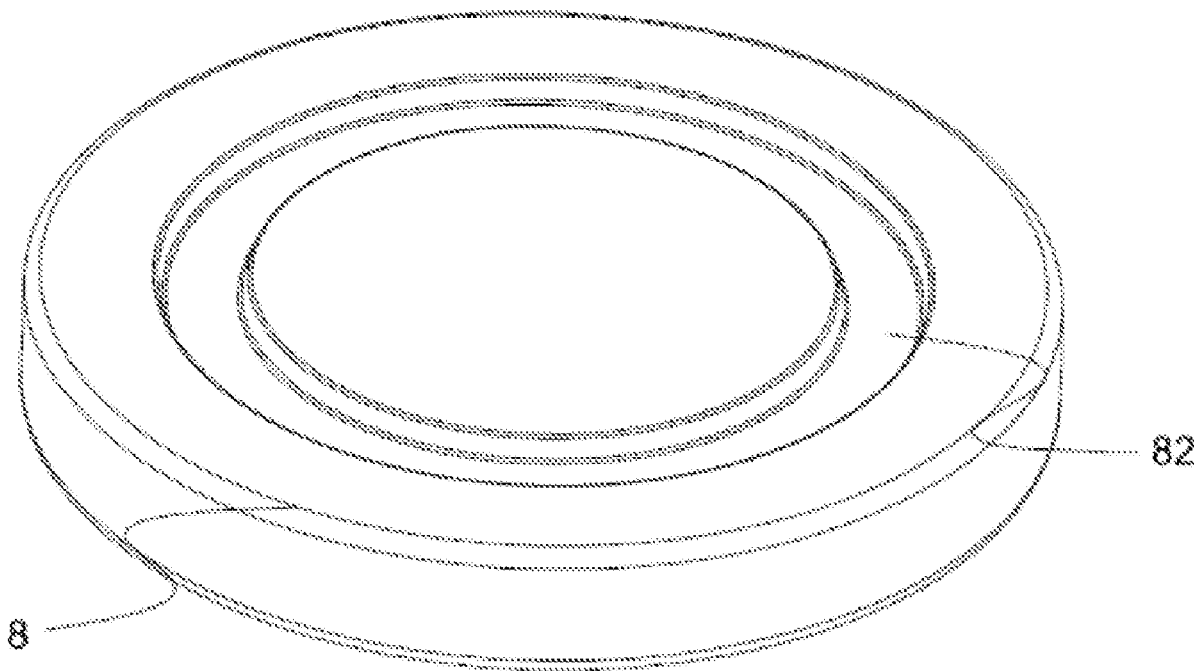
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Disclosed is a structurally simple, easy assembled and multifunctional kettlebell. The kettlebell comprises a kettlebell body. The kettlebell body is provided with a counterweight groove for placing at least one counterweight. The kettlebell body is provided with a positioning cover for positioning the counterweight within the kettlebell body. The positioning cover is detachably mounted in the counterweight groove. The positioning cover is capable of being raised and lowered on the kettlebell body for positioning each counterweight.



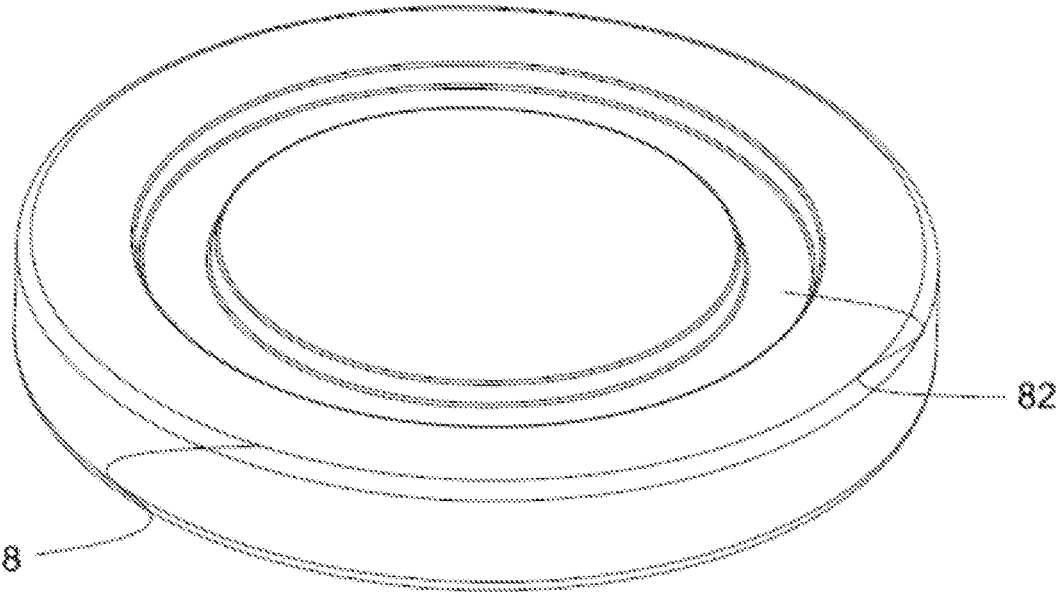


Fig. 1

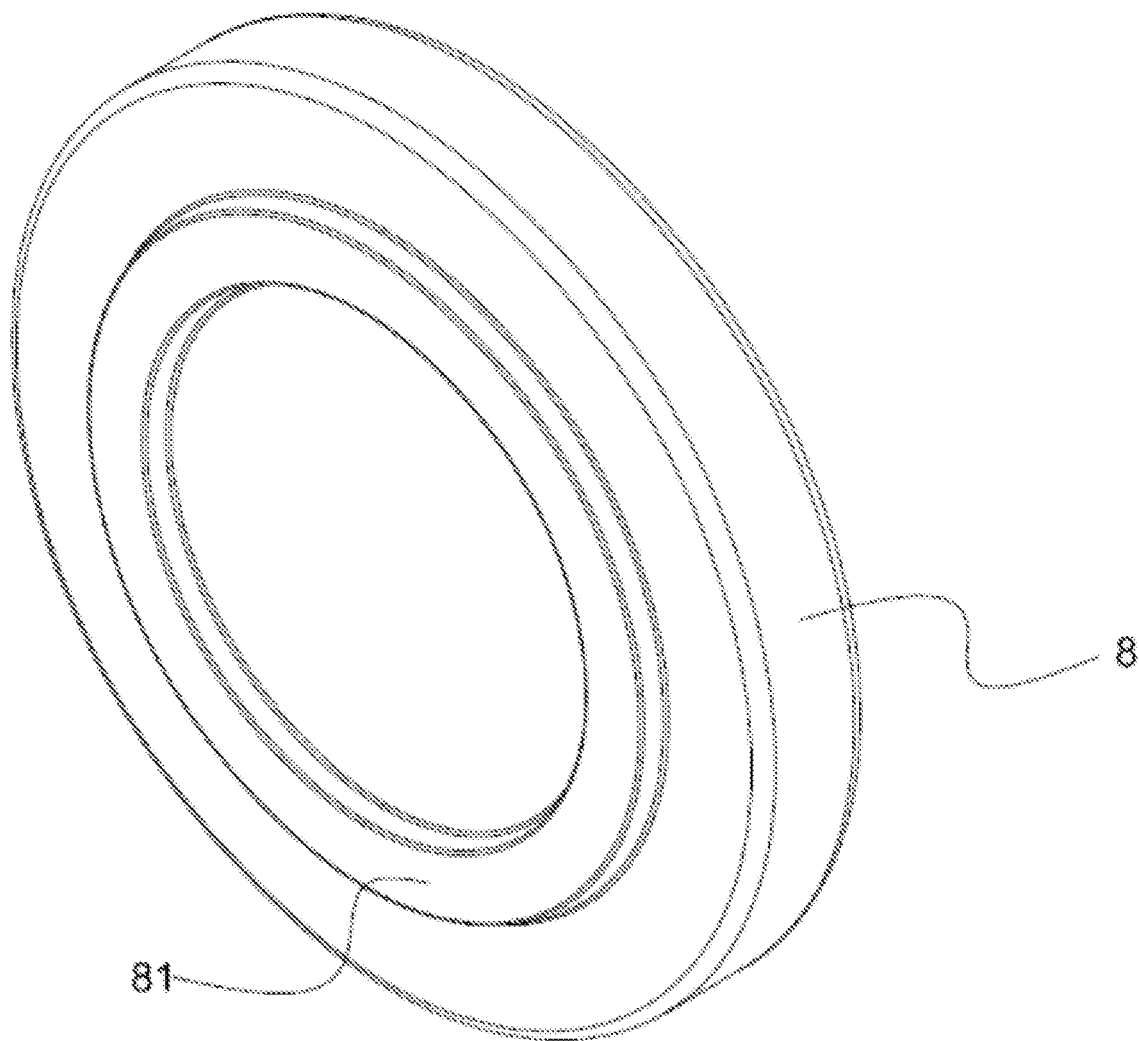


Fig. 2

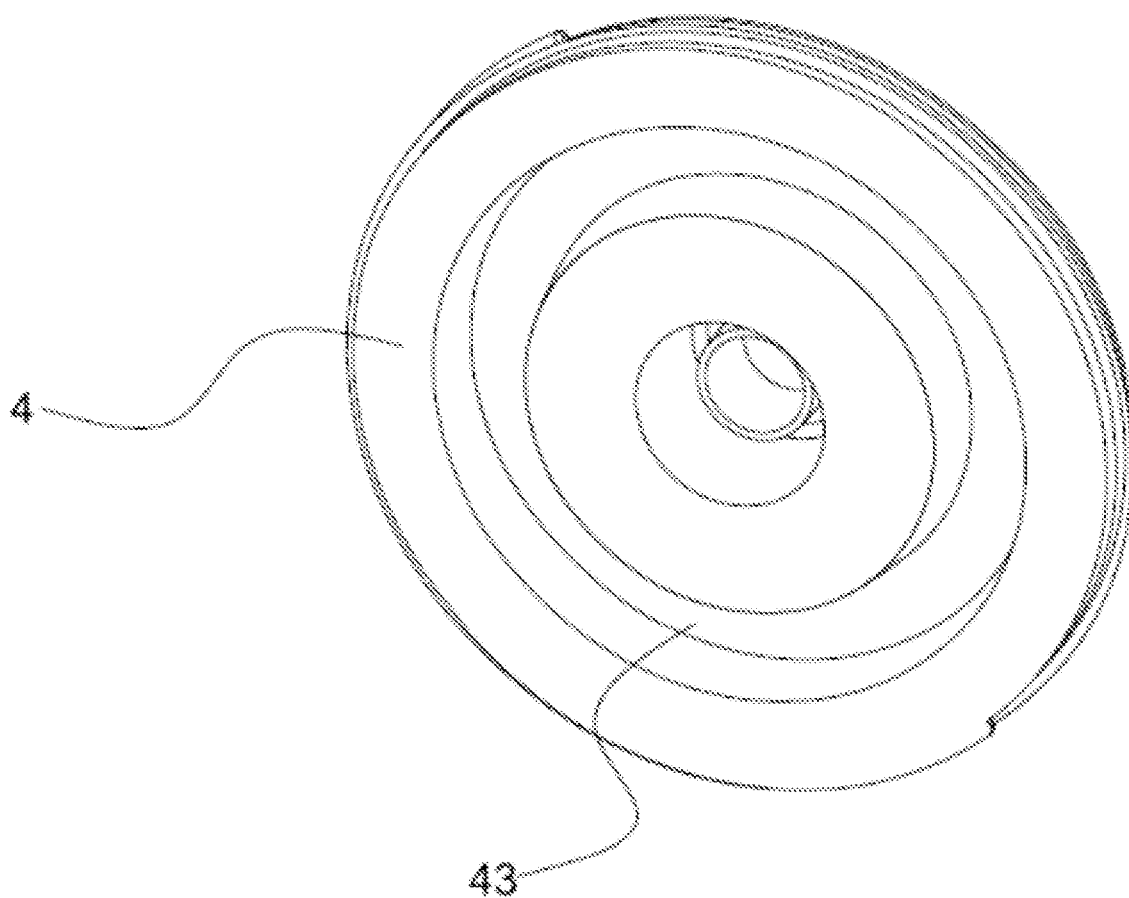


Fig. 3

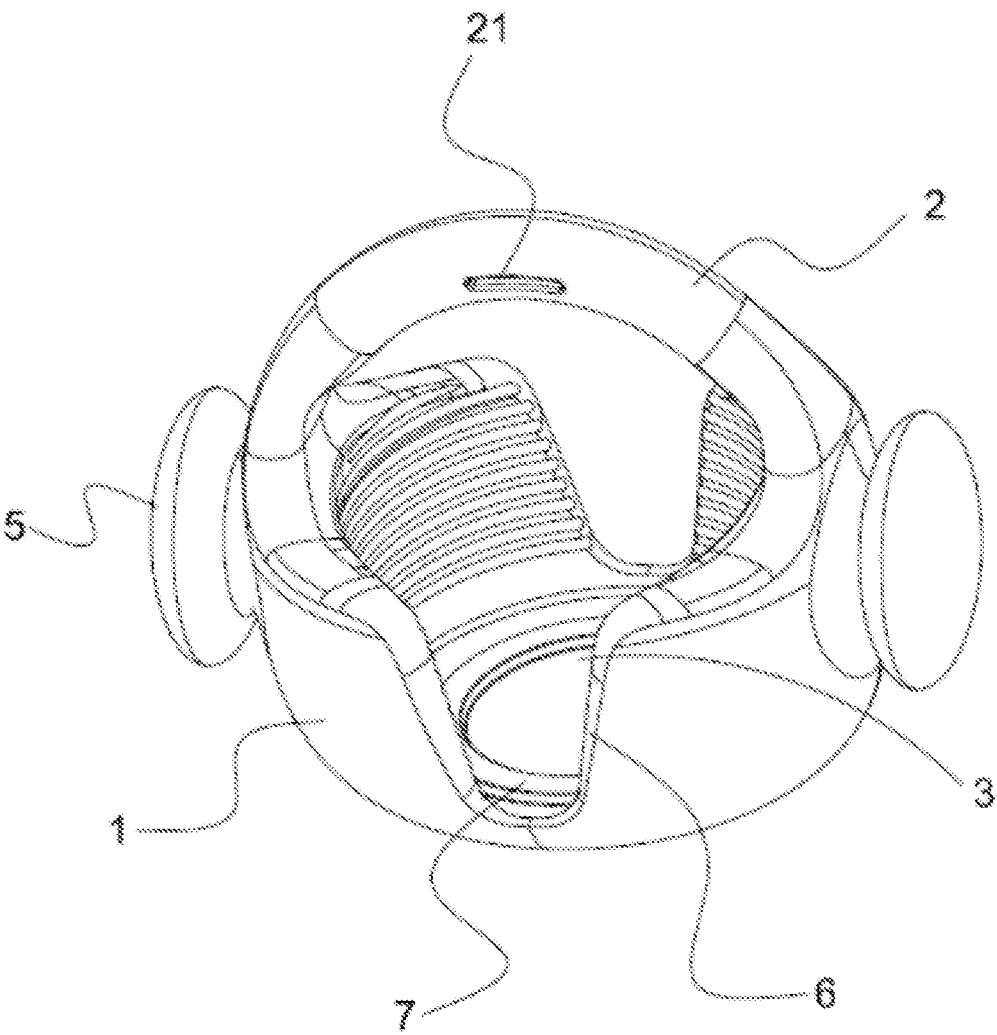


Fig. 4

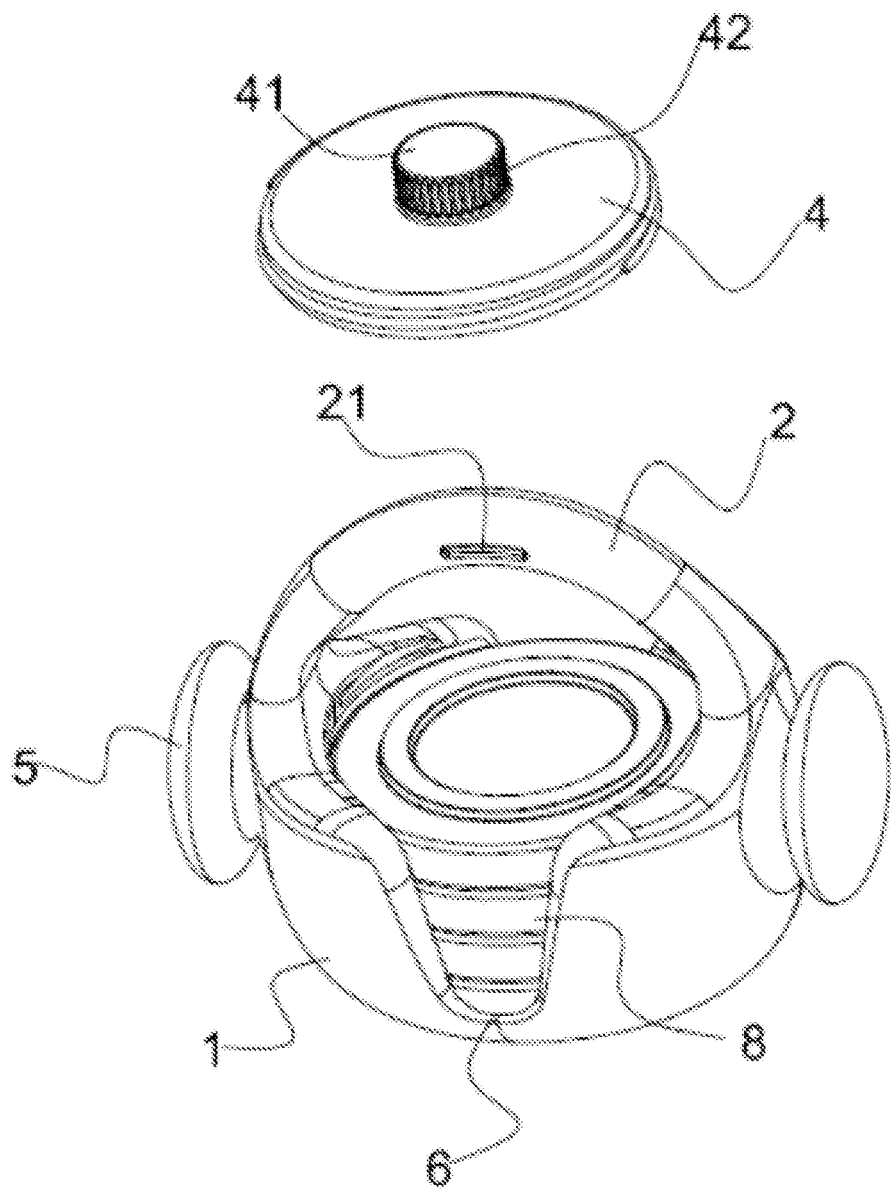


Fig. 5

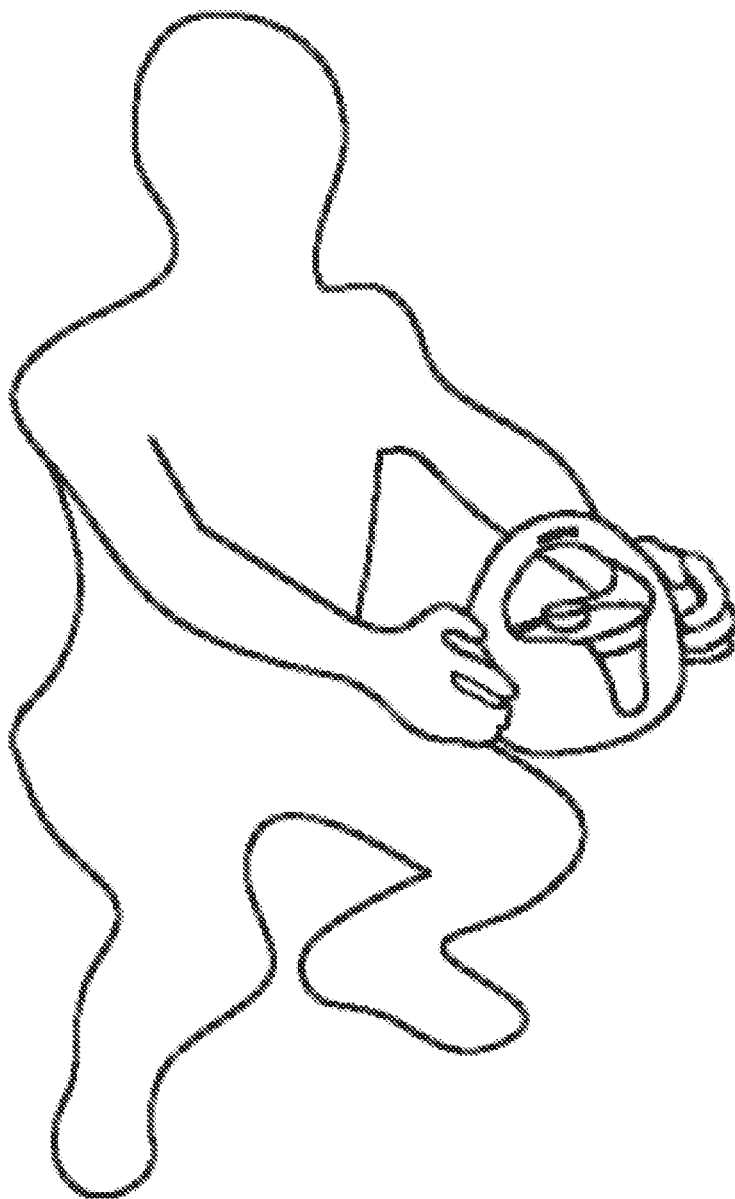


Fig. 6

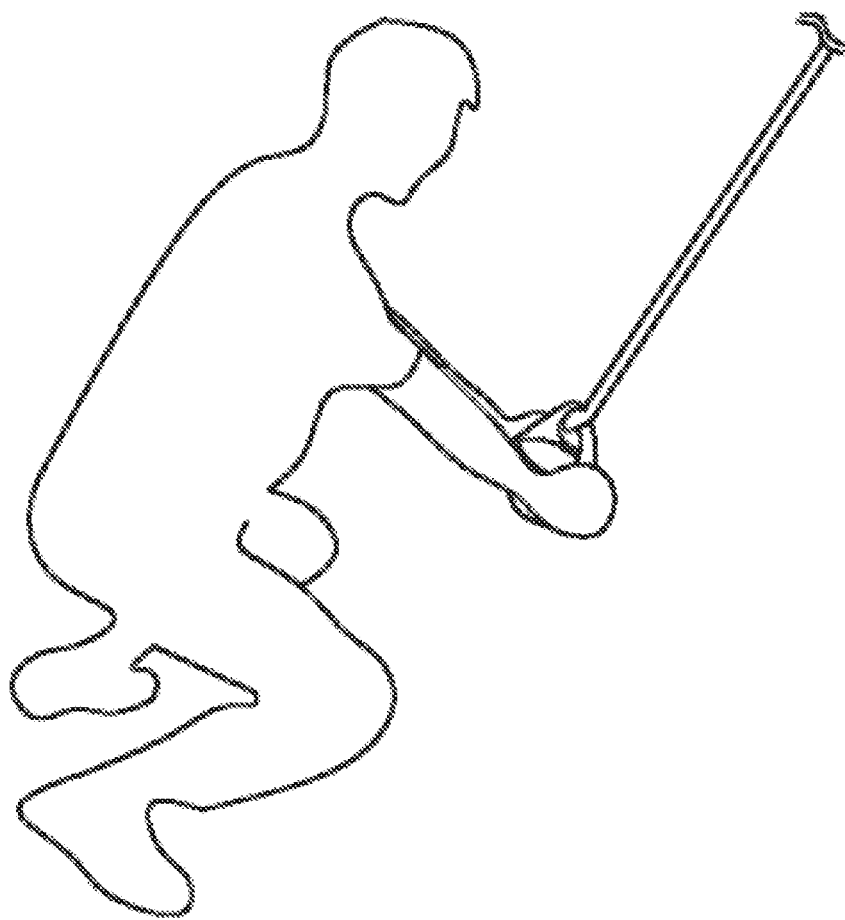


Fig. 7

KETTLEBELL**CROSS REFERENCE OF RELATED APPLICATIONS**

[0001] The present application claims the benefit of Chinese Patent Application No. 202120752592.8 entitled "A Novel Kettlebell," filed on Apr. 13, 2021, in the China National Intellectual Property Administration, the entire content of which is incorporated herein in its entirety.

TECHNICAL FIELD

[0002] The subject matter herein relates to a technical filed of exercise apparatus, especially to a kettlebell.

BACKGROUND

[0003] Kettlebell is a common and simple exercise apparatus, mainly used for users to strengthen their fitness. The difference between kettlebell training and dumbbell and barbell training is that kettlebells are more effective in improving the overall explosive power. Therefore, kettlebells have been loved by fighters and martial artists. However, traditional kettlebells have fixed weights, so trainers need to prepare a set of kettlebells with different weights to meet their different weight training. Although this can meet the needs of trainers. But it is extremely inconvenient to have all kinds of kettlebells with various weights. In order to solve this problem, Chinese Patent No. CN206304284U discloses a kettlebell with adjustable counterweight, which mainly includes: a kettlebell body with a shaft hole and a counterweight hole; and multiple counterweights; the counterweight has a groove and a rotating groove, the groove width of the groove is smaller than the groove width of the rotating groove; these counterweights are located in the counterweight hole; an adjustment unit with a top cover, a shaft rod, a plurality of receiving rods, and a lever; the top cover has a shaft hole, the receiving rods are radially connected to the shaft; the lever is pivotally connected to one end of the shaft; and the shaft passes through the shaft hole; the shaft hole and the counterweight hole, so that the bearing rod is located in the rotation groove of the counterweight; when the shaft rotates a predetermined angle, the bearing rod is located at the position corresponding to the counterweight through the groove, so that the corresponding counterweight can be detached from the kettlebell body; and the receiving rod is located at the groove position that does not correspond to the counterweight, so that the corresponding counterweight is fixed in the kettlebell body, so as to achieve diversified choose the effort the effect of the weight. However, although the Chinese Patent No. CN206304284U solves the problem as above, it still has the following disadvantages.

[0004] 1. The structure of the kettlebell in the Chinese Patent No. CN206304284U is complicated, which leads to the complicated operation of replacing the counterweight; the trainer cannot quickly replace the counterweight, which interrupts the training cycle of the trainer, which is not only unfavorable for the trainer's use, but also affects the trainer's experience.

[0005] 2. The training function of the kettlebell is single, and the trainer can only do training about lifting, and there is no way to effectively exercise other parts of the body.

SUMMARY

[0006] In view of above, one object of the present disclosure is to provide a kettlebell with simple structure, convenient disassembly and assembly, and multiple training functions.

[0007] In order to achieve the object above, the present disclosure provides a kettlebell, comprises a kettlebell body; the kettlebell body is provided with a lifting handle; the kettlebell body is provided with a counterweight groove for placing at least one counterweight; and the kettlebell body is provided with a positioning cover for positioning the counterweight within the kettlebell body; the positioning cover is detachably mounted in the counterweight groove; the positioning cover is capable of being raised and lowered on the kettlebell body for positioning each counterweight.

[0008] In some embodiments, the positioning cover is capable of being raised and lowered and is rotatably mounted on a housing for positioning each counterweight.

[0009] In some embodiments, the positioning cover is capable of being raised and lowered above the counterweight; a positioning bolt for positioning the positioning cover above each counterweight is arranged between the positioning cover and the housing.

[0010] In some embodiments, a first limiting device for further positioning the counterweight to prevent the counterweight from sliding in the counterweight groove is arranged within the kettlebell body.

[0011] In some embodiments, the first limiting device is: a first positioning flange arranged on top of inner surface of the kettlebell body, and a first positioning slot arranged on bottom surface of the counterweight and adapted for the first positioning flange.

[0012] In some embodiments, a second limiting device for further positioning the counterweight to prevent the counterweight from sliding in the counterweight groove is anchored in the positioning cover.

[0013] The second limiting device is: a second positioning slot arranged on top of inner surface of the positioning cover, and a second positioning flange arranged on upper surface of the counterweight and adapted for the second positioning slot.

[0014] In some embodiments, adjacent counterweights in the vertical direction are locked together through the match of the second positioning flange and the first positioning slot.

[0015] In some embodiments, the kettlebell body is provided with a snatch device for one-handed or two-handed snatching of the kettlebell body.

[0016] In some embodiments, the snatching device is a hand holder arranged on both sides of the kettlebell body to facilitate exercisers to hold the kettlebell body.

[0017] In some embodiments, the lifting handle is provided with a connecting device connected with an external elastic rope.

[0018] In some embodiments, the connecting device is: the lifting handle being provided with a connecting groove allowing the external elastic rope to pass through.

[0019] In some embodiments, the positioning cover is provided with a rotating device that is convenient for rotating the positioning cover.

[0020] In some embodiments, the rotating device is a rotatable protrusion, and the rotatable protrusion is secured on the positioning cover.

[0021] In some embodiments, a plurality of anti-skid strips are arranged on the rotatable protrusion

[0022] In some embodiments, an opening of the counterweight is located below the lifting handle.

[0023] In some embodiments, an adjustment port connecting for communicating outside of the kettlebell and the counterweight groove is arranged on the kettlebell body.

[0024] The present disclosure at least has the following advantages and benefits.

[0025] 1. Simple structure and easy to use. When in use, the counterweight is put directly into the counterweight groove, and then is covered with the positioning cover. The positioning cover is then screwed to resist the counterweight and secure the counterweight within the counterweight groove for trainers. It is easy to use, easy to operate, fast and convenient, which greatly saves the trainer's time to replace the counterweight, and greatly facilitates the trainer to perform different weight replacement training. Moreover, the opening of the counterweight groove is located under the lifting handle, which not only facilitates the placement of the counterweight, but also prevents the positioning cover from occupying the position of the kettlebell body to interfere with the exercise of the trainer.

[0026] 2. The rotatable protrusion and the anti-skid strips may facilitate to rotate the positioning cover and improve the replacement efficiency.

[0027] 3. The first positioning flange is capable of engaging with the first positioning slot on the bottom surface of the counterweight; the second positioning slot on the positioning cover is capable of engaging with the second positioning flange of the counterweight. The second positioning flange on the counterweight is capable of engaging with the first positioning slot. In such, the counterweights may be engaged with each other so that they can neatly arranged upwards, effectively preventing its movement, and can better fix the counterweight in the counterweight, and further positioning and matching the counterweight to prevent the counterweight from sliding in the counterweight groove.

[0028] 4. Two hand holders may enable the trainer to hold the kettlebell with both hands to lift the kettlebell, so that the trainer can lift the kettlebell with both hands for squatting and other training, increasing the training items, and achieving the purpose of one kettlebell for multiple exercises. It is helpful to improve the training experience of the trainer.

[0029] 5. The connecting groove can further increase the exercise function of the kettlebell, so that it can be connected to the external elastic rope, so that it can do more stretching training about the hand muscles and chest muscles, and increase the training items of the trainer. It can also prevent the kettlebell from falling when lifting the kettlebell, which is beneficial to protect the trainer.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] FIG. 1 is a schematic diagram of the kettlebell according to one embodiment of the present disclosure.

[0031] FIG. 2 is a schematic diagram of the kettlebell according to one embodiment of the present disclosure.

[0032] FIG. 3 is a schematic diagram of the positioning cover according to embodiments of the present disclosure.

[0033] FIG. 4 is a schematic diagram of the counterweight according to embodiments of the present disclosure.

[0034] FIG. 5 is a schematic diagram of the counterweight according to embodiments of the present disclosure.

[0035] FIG. 6 is a schematic diagram of the kettlebell training according to embodiments of the present disclosure.

[0036] FIG. 7 is a schematic diagram of the kettlebell training according to embodiments of the present disclosure.

DETAILED DESCRIPTION OF THE INVENTION

[0037] The detailed implementations of the present disclosure will be further described below in conjunction with the drawings and embodiments. The following embodiments are only used to illustrate the technical solutions of the present disclosure more clearly, and cannot be used to limit the protection scope of the present disclosure.

Embodiment 1

[0038] As shown in FIG. 1 to FIG. 5, a kettlebell is provided. The kettlebell comprises a kettlebell body 1. The kettlebell body 1 is provided with a lifting handle 2. The kettlebell body 1 is provided with a counterweight groove 3 for placing at least one counterweight 8. An opening of the counterweight groove 3 is arranged below the lifting handle 2. The kettlebell body 1 is provided with a positioning cover 4 for positioning the counterweight 8 within the kettlebell body 1. The positioning cover 4 is capable of being raised and lowered and is rotatably mounted within the counterweight groove 3 for positioning each counterweight. When in use, the counterweight is put directly into the counterweight groove 3, and then is covered by the positioning cover 4. The positioning cover is screwed to abutted against the counterweight and therefore the counterweight is positioned within the counterweight groove 3. After this, the kettlebell is ready for trainers. The assembled kettlebell is easy to use and fast and convenient, which greatly saves the trainer's time to replace the counterweight, and greatly facilitates the trainer to perform different weight replacement training. Moreover, the opening of the counterweight groove 3 is located below the lifting handle 2, which not only facilitates the placement of the counterweight, but also prevents the positioning cover 4 from occupying the position of the kettlebell body 1 to interfere with the exercise of the trainer.

[0039] In order to facilitate the positioning cover 4 to be rotated and improve the replacement efficiency, the rotatable protrusion 41 is arranged on the positioning cover 4 for facilitating rotating the positioning cover 4. The rotatable protrusion 41 is anchored on the positioning cover 4.

[0040] In order to facilitate rotating the rotatable protrusion 41, a plurality of anti-skid strips 42 are arranged on the rotatable protrusion 41.

[0041] In order to better fix the counterweight 8 in the counterweight groove 3, the counterweight can be further positioned to prevent the counterweight 8 from sliding in the counterweight groove 3. A first positioning flange 7 is provided above the inner surface of the kettlebell body 1, and a first positioning slot 82 is provided on the bottom surface of the counterweight 8 to engage with the first positioning flange 7. The upper surface of the positioning cover 4 is provided with a second positioning slot 43, and the upper surface of the counterweight 8 is provided with a second positioning flange 81 that engages with the second positioning slot 43. Two adjacent counterweight 8 are engaged with each other in the vertical direction through the second positioning flange 81 and the first positioning slot 82. The first positioning flange 7 is engaged with the first positioning slot 82 on the bottom surface of the counterweight 8.

weight 8. The second positioning slot 43 on the positioning cover 4 is engaged with the second positioning flange 81 of the counterweight 8. The second positioning flange 81 on the counterweight 8 is engaged with the first positioning slot 82. In such, the counterweights can be neatly arranged upwards, effectively preventing its movement.

[0042] In order to increase the training items for the trainers, a hand holder 5 is arranged on both sides of the kettlebell body 1 to facilitate exercisers to hold the kettlebell body 1. The two hand holders 5 allow trainers to grasp the hand holder 5 and then lift the kettlebell. Trainers may lift the kettlebell with both hands for squatting and other training, which increases the training items, realizes the purpose of multiple exercise with one kettlebell, and helps improve the training experience of the trainer.

[0043] In order to further increase the exercise function of the kettlebell, the lifting handle 2 is provided with a connecting groove 21 connected with an external elastic rope. The kettlebell may be connected with an external elastic rope, so that it can do more stretching training on the hand muscles and chest muscles, increase the training methods of the trainer, and enable the trainer to get better exercise. It can also prevent the kettlebell from falling when lifting the kettlebell, which is beneficial to protect the trainer.

[0044] In order to facilitate the placement of the counterweight into the counterweight groove 3, the kettlebell body 1 is provided with an adjustment port 6 for communicating the exterior of the kettlebell and the counterweight groove 3. The adjustment port 6 allows the counterweight in the counterweight groove 3 to be turned when the counterweight is stuck within the counterweight groove 3.

[0045] Referred to FIG. 6, a schematic diagram of the trainer holding the kettlebell with both hands and squatting to train the hand and leg muscles is shown.

[0046] Referred to FIG. 7, a schematic diagram of a kettlebell connected to an external elastic rope for chest and leg muscle training.

Embodiment 2

[0047] Based on the above disclosure, the method to positioning cover 4 to position the counterweight may be: the positioning cover 4 can be raised and lowered above each counterweight on the kettlebell body. A positioning bolt for positioning the positioning cover 4 above each counterweight is provided between the positioning cover 4 and the kettlebell body 1.

What is claimed is:

1. A kettlebell, comprising: a kettlebell body; wherein the kettlebell body is provided with a lifting handle; the kettlebell body is provided with a counterweight groove for placing at least one counterweight; and the kettlebell body is provided with a positioning cover for positioning the counterweight within the kettlebell body; the positioning cover is detachably mounted in the counterweight groove; the positioning cover is capable of being raised and lowered on the kettlebell body for positioning each counterweight.

2. The kettlebell according to claim 1, wherein the positioning cover is capable of being raised and lowered and is rotatably mounted on a housing for positioning each counterweight.

3. The kettlebell according to claim 1, wherein the positioning cover is capable of being raised and lowered above the counterweight; a positioning bolt for positioning the positioning cover above each counterweight is arranged between the positioning cover and the housing.

4. The kettlebell according to claim 1, wherein a first limiting device for further positioning the counterweight to prevent the counterweight from sliding in the counterweight groove is arranged within the kettlebell body.

5. The kettlebell according to claim 4, wherein the first limiting device is: a first positioning flange arranged on top of inner surface of the kettlebell body, and a first positioning slot arranged on bottom surface of the counterweight and adapted for the first positioning flange.

6. The kettlebell according to claim 1, wherein a second limiting device for further positioning the counterweight to prevent the counterweight from sliding in the counterweight groove is anchored in the positioning cover.

7. The kettlebell according to claim 6, wherein the second limiting device is: a second positioning slot arranged on top of inner surface of the positioning cover, and a second positioning flange arranged on upper surface of the counterweight and adapted for the second positioning slot.

8. The kettlebell according to claim 7, wherein adjacent counterweights in the vertical direction are engaged together through the match of the second positioning flange and the first positioning slot.

9. The kettlebell according to claim 1, wherein the kettlebell body is provided with a snatch device for one-handed or two-handed snatching of the kettlebell body.

10. The kettlebell according to claim 9, wherein the snatching device is a hand holder arranged on both sides of the kettlebell body to facilitate exercisers to hold the kettlebell body.

11. The kettlebell according to claim 1, wherein the lifting handle is provided with a connecting device connected with an external elastic rope.

12. The kettlebell according to claim 11, wherein the connecting device is: the lifting handle being provided with a connecting groove allowing the external elastic rope to pass through.

13. The kettlebell according to claim 1, wherein the positioning cover is provided with a rotating device that is convenient for rotating the positioning cover.

14. The kettlebell according to claim 13, wherein the rotating device is a rotatable protrusion, and the rotatable protrusion is secured on the positioning cover.

15. The kettlebell according to claim 14, wherein a plurality of anti-skid strips are arranged on the rotatable protrusion.

16. The kettlebell according to claim 1, wherein an opening of the counterweight is located below the lifting handle.

17. The kettlebell according to claim 1, wherein an adjustment port connecting for communicating outside of the kettlebell and the counterweight groove is arranged on the kettlebell body.

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