PROTECTIVE SHIELD FOR WEIGHT PLATE AND LIFTING BAR

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(57) ABSTRACT

A protective shield for the weight plate and lifting bar of fitness equipment, so that the coating layer on both the weight plate and lifting bar will not be damaged, scratched or scraped off, due to the intended adding or removing of weight plates.
PROTECTIVE SHIELD FOR WEIGHT PLATE AND LIFTING BAR

FIELD AND BACKGROUND OF THE INVENTION

[0001] The present invention relates generally to fitness equipment and weight lifting; especially to the “free weights” system where the weight plates can be added to or removed from the lifting bar at the choice of individual users.

[0002] “Free weights” fitness equipment allows users to change the weight plates put on the two ends of a lifting bar. Weight plates are mostly a round disk made of cast iron or steel with a hole in the center. To protect the weight plates and the lifting bar, from the sweat, moisture, or other elements, nowadays, these weight plates and lifting bars have a layer of coating.

[0003] When adding weight plates to the lifting bar, and when removing weight plates from the lifting bar, users will inevitably cause some scraping and scratching to the coating layer on the lifting bar and weight plates, resulting in undesired rusting.

[0004] To provide a protective layer between the weight plates and the lifting bars, manufacturers currently employ a 2-step molding process whereby a first protective layer (such as urethane or other materials) is molded into shape, leaving the center core portion exposed. A second molding is then used to put a second protective layer around the exposed portion of the center core on the weight plates. This 2-step molding process is both time-consuming and expensive.

OBJECTS AND SUMMARY OF THE INVENTION

[0005] Present invention provides a cost-effective protective shield to the weight plate and lifting bar, so that the coating on both the weight plate and lifting bar will not be damaged due to the intended adding or removing of weight plates.

DESCRIPTION OF THE DRAWINGS

[0006] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate the preferred embodiments of the invention and together with the description, serve to explain the principles of the invention.

[0007] A brief description of the drawings is as follows:

[0008] FIGS. 1a and 1b show a protective shield whereby the sidewalls of two rings overlapping each other.

[0009] FIGS. 2a and 2b show a protective shield whereby the end of two sidewalls abut each other.

[0010] FIG. 3 shows a typical way of weight plate fitted to a lifting bar.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0011] In a first embodiment as shown in FIGS. 1a and 1b, a first flat ring 1 having a sidewall circumscribing the inner diameter of said first flat ring 1 can be fitted to the hole of a weight plate.

[0012] A second flat ring 2 having a sidewall circumscribing the inner diameter of said second flat ring 2 will be sized to be fitted snugly to the inside of first sidewall.

[0013] Lifting bar will be in contact with the inside diameter of said second sidewall. Both sidewall have a height equaling the thickness of the weight plate.

[0014] In a second embodiment as shown in FIGS. 2a and 2b, a first flat ring 1 having a sidewall circumscribing the inner diameter of said first flat ring 1 can be fitted to the hole of a weight plate.

[0015] A second flat ring 2 is made like the first flat ring, so that when fitted to a weight plate, the sidewalls abut each other, having a total height equaling the thickness of the weight plate.

[0016] Suitable materials for producing the protective shield of present invention include rubber, PE, PVC, urethane, polyurethane or other durable synthetic materials.

[0017] FIG. 3 shows the manner a weight plate is fitted to a lifting bar. With present invention, there will not be scratching or scraping the coating layer on the weight plate or the lifting bar.

1. A protective shield used on weight plate and lifting bar, comprising:

a. A first flat ring having a first sidewall circumscribing the inner diameter of said ring; and

b. A second flat ring having a second sidewall circumscribing the inner diameter of said second ring, the outside diameter of said second sidewall can be snugly fitted to the inside diameter of said first sidewall, said first and second sidewall having a height equaling the thickness of a weight plate, so that when both rings are fitted to a weight plate, each of the one face of said first and second ring will be fitted against the side of a weight plate, the outside diameter of said first sidewalk is in contact with the hole of the weight plate, and the inside diameter of said second sidewalk is in contact with the lifting bar.

2. A protective shield used on weight plate and lifting bar, comprising:

a. A first ring having a first sidewall circumscribing the inner diameter of said ring; and

b. A second flat ring having a second sidewalk circumscribing the inner diameter of said second ring, said first and second sidewalk having same outside and inside diameters, so that when both rings are fitted to a weight plate, each of the one face of said first and second ring will be fitted against the side of a weight plate, the total height of said first and second sidewalks equaling the thickness of the weight plate.

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