EXERCISE EQUIPMENT HANDLE GRIPS

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ABSTRACT
The device is an exercise equipment hand grip that can be removably installed on a piece of exercise equipment. The hand grip permits the user to maintain an open grip of the hand. The hand grip can be a soft visco-elastic, urethane, close cell foam, rubber or similar material. The hand grip has a generally cylindrical shape where one end of the cylinder has a larger circumference than the other end. The device thereby has a cone like shape with the narrow end held at the thumb side of the palm and the larger diameter end fits at the side of the palm. The holder includes a lengthwise opening that allows the holder to be placed over the bar grips of numerous exercise equipment and devices such as handles on weight machines, bar bells, dumb bells and EZ curl bars.
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RELATED APPLICATION

[0001] This application claims priority to and benefit of provisional application Ser. No. 60/838,569 entitled “Exercise Equipment Handle Grips” and filed Aug. 17, 2006. This provisional application is incorporated by reference herein.

BACKGROUND OF INVENTION

[0002] 1. Field of Use
[0003] The device subject of this disclosure pertains to shaped hand grips that enhance the development of muscle.
[0004] 2. Existing Technology
[0005] Numerous weight and lifting machines exist.

SUMMARY OF INVENTION

[0006] The device is an exercise equipment hand holder apparatus that maintains an open grip of the hand of the user. The holder can be a soft visco-elastic, urethane, close cell foam, rubber or similar material. The holder has a generally cylindrical shape where one end of the cylinder has a larger circumference. The device has an interior annulus that allows the device to fit over bar grips or other exercise equipment components. The holder includes a lengthwise opening that allows the holder to be placed over the bar grips of numerous exercise equipment and devices. This application incorporates by reference herein the provisional application Ser. No. 60/709,286 filed Nov. 3, 2005 entitled “Elastic Exercise Grips to Attach to Resistive Exercise Equipment”.

SUMMARY OF DRAWINGS

[0007] The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate preferred embodiments of the invention. These drawings, together with the general description of the invention given above and the detailed description of the preferred embodiments given below, serve to explain the principles of the invention.
[0008] FIG. 1 illustrates a top view (first end) of the hand grip and the inner annulus.
[0009] FIG. 2 illustrates a cross sectional view of the hand grip and annulus. Also illustrated is the tapered shape of the device as it extends from a first end (FIG. 1) to the wider second end of FIG. 3.
[0010] FIG. 3 illustrates the wider second end. The inner annulus retains the same approximate diameter.
[0011] FIG. 4 illustrates the placement of the device on dumbbells.
[0012] FIG. 5 illustrates placement of the device on a barbell.
[0013] FIG. 6 illustrates the placement of the device on an EZ curl bar.
[0014] FIG. 7 illustrates the hand grip placed on an exercise machine handle.
[0015] FIG. 8 illustrates as side view of the hand grip, including the narrow first end and the wider second end including the side slit for inserting the holder on the exercise equipment.

DETAILED DESCRIPTION OF INVENTION

[0016] The above general description and the following detailed description are merely illustrative of the subject invention and additional modes, advantages and particulars of this invention will be readily suggested to those skilled in the art without departing from the spirit and scope of the invention.
[0017] FIG. 7 illustrates the hand grip placed on an exercise machine handle. One advantage of the device (hereinafter “hand grips”) is that the hand grips increase the circumference of the device to be grasped and held by the user’s hand. This opens the user’s grip when exercising.
[0018] The increased circumference achieved from installation of the hand grips is advantageous. The increased circumference spreads the grip of the hand to a more open position. This causes the user to use more force to hold the exercise device without any change in the weight of the device. Exercising with the devices achieves greater finger, hand, and forearm strength with increased muscularity. The purpose of opening the hand grip is to fatigue the muscles in the fingers, hands, and forearms more quickly and more thoroughly than when compared to gripping a standard exercise bar (typically 1 inch diameter or 28 to 30 mm). The use of the hand grips will force the muscles in the fingers, hand and forearms to grow stronger and larger to adapt to the increased force required to grip the bar or handle. The hand grip subject of the invention forces the grip, forearm and biceps to work harder with no increase in the number exercise sets being performed, increase in weights or the time spent working out.
[0019] Another advantage of the hand grips is that they can be made of soft, pliable material such as a visco-elastic, urethane or close cell foam. The hand grips may provide a cushioned surface for the user’s hand. The hand grip material is able to yield and form around the palm and fingers when squeezed while exercising. This creates a more secure grip as the user has an increased surface area to grip with his/her hand. The rubber like material of the hand grip yields as the user squeezes (grips) to hold onto the bar or handle. This forms a no slip bond with the handle and the bar. The hand grip both opens the grip of the hand and is squeezable.
[0020] The annulus and lengthwise split of the hand grip permits the device to fit over varying sized equipment. For example, the hand grip can be used with a 1 inch to 1 1/4 inch diameter bar.
[0021] For example, the hand grip facilitates a reverse curl grip with dumbbells. Starting with the dumbbells in a reverse curl grip, slowly reverse curl the dumbbells up and rotate the dumbbells 180 degrees to the finish at the top of the curl. On the negative portion of the repetition repeat the same motion down. The positive and negative portions of the repetition are to be done slowly and in complete control. This maneuver or exercise feels very awkward without the hand grip subject of the invention. The increased gripping area and resulting control makes this a great exercise.
[0022] The hand grip will be beneficial to persons involved in sports that require excellent hand and finger
strength. Examples include rock climbing, martial arts, baseball, football, basketball, bodybuilding, tennis and golf. Another group that would benefit would be persons involved in highly demanding activities such as those serving in the United States Armed Forces, police officers, firemen, and emergency medical personnel.

[0023] In one embodiment, the hand grips may be manufactured using a plastic injection molding machine. The material used in manufacturing the hand grips may be a soft rubber like material. In a preferred embodiment, the hand grip includes 1 to 1⅛ inch outside diameter (OD) hole or annulus in the center. The annulus extends longitudinally from the small end to the wide end of the hand grip. The hand grip also has a split or opening on one side that allows the hand grip to be spread apart to fit over a standard 1" OD exercise barbell, dumbbell handle, or exercise machine handle. It will be appreciated that the hand grip may be removed from the equipment when the user is finished and the hand grip placed on other equipment. The removal of the hand grip enhances sanitation of exercise equipment.

[0024] The hand grips are designed to be wider at one end, for example 2 inches in an outer diameter (first end) than the other end, for example 2½ inches at a second end. This forms a conical shape.

[0025] FIG. 1 illustrates an end view of the first end of the hand grip comprising an outer component 112 of a soft, pliable material such as a visco-elastic, urethane or close cell foam. Also illustrated is an inner annulus 117. The diameter of the annulus may remain relatively constant for the length of the device. See FIG. 2. The length of the hand grip may be 4½ inches. Other lengths are within the scope of the invention.

[0026] FIG. 2 illustrates a cross-sectional view of the device shown in FIG. 1. The outer diameter of the hand grip 110 expands from the first end 111 to the second end 112. FIG. 2 also illustrates the cross-sectional view of the device as shown from the second end (FIG. 3). In one example, the outer diameter of the first end is 2 inches and expands to 2½ inches at the second end. Note that in this example, the diameter of the annulus 117 remains constant at 1⅛ inches.

[0027] Also illustrated in FIG. 2 is the split or slit 115 that extends through the length and thickness of the hand grip 110 to the annulus 117. As explained elsewhere, this allows the device to be open longitudinally to be placed over a piece of exercise equipment such as a handle on a weight machine or a weight bar.

[0028] The hand grip is held in the grip of the user’s hand. The wider hand grip end (second end) is held at the bottom of the user’s palm, with the narrower end (first end) held against the thumb end of the palm. This design allows the bar or handle to be held more squarely or securely in the palm of the hand. This includes better balance and set straight. This is a more ergonomically correct position in the palm of the hand. The design also forces the fingers to be spread more open when contrasted with holding a bar or handle not using the grips.

[0029] FIG. 1 illustrates a top view (first end) of the hand grip showing a 2 inch outside diameter and the inner annulus 117 having a 1⅛ inch diameter.

[0030] FIG. 2 illustrates a cross sectional view of the hand holder 110 and the annulus 117. Also illustrated is the tapered shape of the device as it extends from a first end to the wider second end. Also illustrated is the side slit 115 used to open the conical shaped handle for placement on an exercise bar.

[0031] FIG. 3 illustrates the second end of the hand grip wherein the outside diameter is illustrated 2½ inches. The inner annulus 117 retains the same approximate 1 inch to 1⅛ inch diameter.

[0032] FIG. 4 illustrates the placement of the hand grips 110 on dumbbells 201. The hand grips are placed on the connecting bar 200. The bars have an approximate equal outer diameter than other exercise equipment. Note that the split 115 extending the length of the hand grip may be used to fit the hand grip on the bar.

[0033] FIG. 5 illustrates placement of the hand grips 110 on a bar bell 203. The grips are placed at the hand hold position of the user.

[0034] FIG. 6 illustrates the placement of the hand grip 110 on an EZ curl bar 204.

[0035] FIG. 7 illustrates the hand holder 110 placed on a handle 207 of an exercise machine pulling device 205. Also illustrated is the rope of the pulling device.

[0036] FIG. 8 illustrates as side view of the hand grip 110, including the narrow first end 111 and the wider second end 113 including the side slit 115 for inserting the holder on the exercise equipment 200.

[0037] This specification is to be construed as illustrative only and is for the purpose of teaching those skilled in the art the manner of carrying out the invention. It is to be understood that the forms of the invention herein shown and described are to be taken as the presently preferred embodiments. As already stated, various changes may be made in the shape, size and arrangement of components or adjustments made in the steps of the method without departing from the scope of this invention. For example, equivalent elements may be substituted for those illustrated and described herein and certain features of the invention may be utilized independently of the use of other features, all as would be apparent to one skilled in the art after having the benefit of this description of the invention.

[0038] Further modifications and alternative embodiments of this invention will be apparent to those skilled in the art in view of this specification.

1. A removable exercise equipment hand grip apparatus creating an increased diameter for an open grip of the user’s hand comprising:
   a) a soft visco-elastic, urethane, close cell foam, rubber or similar material having a generally cylindrical shape with a first end and a second end wherein the second has a larger circumference than the first end; and
   b) the hand grip further comprising an opening along the length of the hand grip and extending to an annulus within the hand grip extending from the first end to the second end.

2. The hand grip of claim 1 wherein the hand grip may be installed over the handle of exercise equipment causing the equipment handle to be cushioned and the circumference of the equipment to be grasped by a user’s hand is increased.

3. The hand grip of claim 1 further comprising the user’s palm opposite the thumb grasping the larger circumference of the hand grip.

4. The hand grip of claim 1 wherein the first end has a diameter of approximately 2 inches and the second end has a diameter of approximately 2½ inches and the annulus has a diameter of approximately 1 to 1¼ inch.
5. A removable exercise equipment hand grip dimensioned to fit over an exercise equipment bar comprising:
   a) a hand grip having a first end and a second end comprising a side opening to an annulus of the hand grip that can fit over a hand hold of exercise equipment;
   b) the hand grip further comprising a rubber or visco-elastic material; and
   c) the hand grip wherein the length between the first end and the second end is at least 4 inches.
6. The hand grip of claim 5 further comprising a first end having an outside diameter of approximately 2 inches and a second end having an outside diameter of approximately 2 1/2 inches.
7. A removable cone shaped, flexible urethane hand grip that opens and fits as a sleeve over dumbbell handles, barbells, EZ curl bars, or exercise machine handles and further comprising the user holding a larger diameter end of the grip with the side of the palm opposite the thumb.
8. The hand grip of claim 7 further comprising opening the grip of the user's hand when using exercise equipment.
9. The hand grip of claim 7 wherein the user's hand grip is caused to be more open while using the exercise equipment, thereby requiring increased finger, forearm, wrist and bicep strength to control the exercise equipment.
10. The hand grip of claim 7 comprising the user to hold the equipment more securely and squarely.

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