WEIGHTED EXERCISE GLOVE

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Abstract:
The present invention provides an apparatus for conditioning the arms and upper body. A weighted glove consists of a hand section and a forearm section. The forearm section includes a flexible weight and a way to secure the apparatus to the user’s arm.
WEIGHTED EXERCISE GLOVE

TECHNICAL FIELD

[0001] The present invention relates to weighted exercise gloves particularly adapted to allow freedom of movement and comfort.

BACKGROUND OF THE INVENTION

[0002] Weighted hand gloves have been used in a variety of contexts. U.S. Pat. Nos. 6,279,163 B1; 4,911,433; and 4,830,360 describe weighted gloves that include weights positioned at various points along the hand portion of the glove, including on the back of the hand and on the fingers. While these gloves may provide some exercise for the wrist, hand, or individual fingers, the weights make it more difficult for the wearer to use his or her hands and so interfere with participation in activities such as racquet sports or sports requiring the wearer to throw or catch a ball.

[0003] Other types of weighted gloves for use as exercise gloves are disclosed in the following U.S. Pat. Nos. 6,553,574 B1; 4,923,418; 4,330,120; 5,124,806; 2,011,362; and 889,397. These gloves likewise employ weights located on the back of the wearer’s hand and, while potentially useful for certain fitness purposes, each restricts or encumbers the motion of the hand or wrist to some degree. In addition, for the glove to provide meaningful exercise to the arms and chest, the user may prefer weights that are heavier than those that can be easily supported by the hand or fingers alone.

[0004] The glove embodying the teachings of the present invention is suitable for use by those pursuing a wide range of physical activities. The hand is essentially unencumbered as it fits into a glove similar in nature to a golf or batting glove. Instead of placing the additional weights on the hand or fingers, the glove of the present invention locates the weights around the wearer’s wrist. This allows for the essentially unfettered movement of the hand, while permitting the glove to include significantly heavier weights than could be supported if the weights were mounted on the hand or fingers.

SUMMARY OF THE INVENTION

[0005] This invention relates to apparatus for developing, strengthening, and toning arm and upper body muscles. More particularly, it relates to a glove that can be worn when participating in a wide range of exercise and sporting activities, and that helps develop certain arm and upper body muscles. The weights are positioned in such a manner as to permit free use of the hand and wrist while exercising, so that the wearer can participate in activities such as tennis or baseball that require use of the hands.

[0006] An object of the present invention is to provide an improved apparatus for toning and developing muscles of the arms and upper torso.

[0007] A further object of the present invention is to provide a flexible weighted glove that does not unduly encumber the hand or fingers with weights and will permit the user to participate in a wide range of athletic activities.

[0008] A further object of this invention is to provide a glove that contains weights that are located around the wrist and lower forearm to condition the muscles of the arm and upper torso when the arm is moved, as in walking, jogging, racket sports, or throwing sports.

[0009] Another object of this invention is to provide a weighted exercise glove that is comfortable to use and does not extend from the wrist beyond the middle of the forearm.

[0010] These and other objects of the invention are attained by means of an exercise glove that covers the hand, wrist, and lower forearm of the wearer and has weights positioned away from the hand that tone and develop arm and upper torso muscles as the arm is moved in the course of normal and regular exercise such as running, walking, tennis, baseball, basketball, and football. The weights are composed of grains or pellets of metal, sometimes known as iron sand, encased in fabric containers. This makes the weights flexible and so more comfortable to wear than more rigid weights.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a perspective view showing the side of the hand and posterior region of the forearm of a person wearing an exercise glove embodying the teachings of the present invention.

[0012] FIG. 2 is a perspective view showing the palm of the hand and forearm of the exercise glove embodying the teachings of the present invention.

[0013] FIG. 3 is a perspective showing the structure of the chambered weight containment pouch.

[0014] FIG. 4 is a cross-section of the exercise glove embodying the teachings of the present invention, viewed from a point near the posterior end of the glove.

[0015] FIG. 5 is a cross-section of the exercise glove embodying the teaching of the present invention, viewed from a point near the mid-portion of the glove.

DESCRIPTION OF THE INVENTION

[0016] The exercise glove of the instant invention is ideally suited for use by a jogger or runner, as well as by persons participating in a wide range of physical activities such as tennis, baseball, basketball, football, squash, platform tennis, cricket, fishing, and non-sports activities. Use of this exercise glove will tone and develop muscles in the arms and upper part of the body. The glove can also be used as a “warm-up” aid for a user who practices a specific activity while wearing the exercise glove and then removes the glove just before the competition begins.

[0017] Turning now to the drawings and FIG. 1, in particular, the inventive glove embodying the teachings of the present invention is shown being worn upon the right hand and forearm of the user. It should be understood, however, that the inventive gloves are made in pairs and ordinarily when exercising the gloves will be worn in pairs, one on each hand. Although the present invention will be explained in regard to the right-hand glove shown, it should be clear that the left-hand glove is of similar (though mirror-imaged) construction and functions in the same manner to condition muscles on the other side of the body.

[0018] The glove contains two sections, referred to herein as the hand section 12, and the forearm section 14. The forearm section resembles a cuff, with one side of the section
open longitudinally along the forearm, which makes the glove easier to put on and take off. The forearm section is fastened snugly by means of one or more straps, buckles, or zippers. The two sections are contiguous, and are sewn or fastened together so that the glove substantially encloses the hand and lower part of the forearm.

[0019] The glove may be constructed of any one or more suitable, pliable, woven or formed materials that will hold the weights in place and permit the wearer a high degree of normal flexibility. Leather or a leather-like plastic may be used on the palm 16 of the glove to increase the ability of the wearer to grasp and use objects, and over the “fingernail” portions of the four fingers to increase the durability of these points of the glove. The remainder of the glove can be manufactured using a strong, flexible fabric such as neoprene or Lyca or Spandex.

[0020] The forearm section 14 of the glove holds the weights used in the glove and includes a strap and loop, strap and buckle, or zipper mechanism to fasten the glove securely in place. The straps (18 and 32 are examples) can be made from a Velcro®-type material designed to cling to itself, and minimize the rotational movement of the forearm section 14 about the arm. It is important that the glove be securely fastened about the arm so that it moves as little as possible with respect to the arm.

[0021] FIG. 2 shows the relative locations of the straps. In the preferred embodiment the strap 18 comprises two contiguous sections of Velcro®; hook section 26 and loop section 28. The purpose of strap 18 is to secure the glove about the lower forearm and wrist of the user so that the glove moves as little as possible with respect to the arm. Strap 18 is fastened by being passed through a buckle 24 that is connected to the upper portion of forearm section 14 by a strap 22. Once passed through buckle 24, strap 18 is then folded back over itself so that the loop section 28 of the Velcro® meets and engages the hook section 26 of the Velcro®. By adjusting the respective two Velcro® sections 28 and 26, the user can adjust the glove’s tension about the user’s wrist and lower forearm.

[0022] In the preferred embodiment, strap 32 comprises a single piece of loop section Velcro®34. Strap 32 is fastened by wrapping it across the open portion of the cuff and engaging a hook section 30 of Velcro® that is attached to the upper portion of the forearm section 14. By adjusting the relative positions of the two Velcro® sections 34 and 30, the user can adjust the glove’s tension about the user’s forearm.

[0023] The flexible weights, shown in FIG. 3, are preferably comprised of many smaller weights 38 (for example iron disks) packed into a flexible chambered container 40. Each flexible chambered container is made of a strong, flexible fabric such as Lyca or Spandex. In the preferred embodiment it is divided into four elongated chambers. Each chamber holds a plurality of metal grains, also known as iron sand, with each grain having a diameter in the range of 1-2 mm. The chambered container may alternatively hold a wide range of similarly-sized dense, small-grained matter such as sand, rock, or glass beads. It is important that the grains included in the flexible weight’s chambered container are small enough so that the flexible weight can conform generally to the shape and diameter of the user’s wrist. The grains must be large enough so that they do not seep through the pores or the seams of the flexible chambered container, and small enough so that they move easily when packed into the flexible chambered container. The flexible chambered container 40 is sealed so that the grains do not escape and is inserted into a receiving pocket 20 (FIG. 2) that is contiguous with a portion of forearm section 14.

[0024] After the flexible chambered container is inserted into the receiving pocket 20 (FIG. 2) located along the forearm section 14, the receiving pocket is sealed, either permanently or in a reclosable fashion. In the case of a reclosable weight pocket, the user can vary the weight of the exercise glove by replacing one flexible chambered container with another having a different mass.

[0025] Cross-section FIG. 4 shows in more detail the operation of strap 32. The user inserts his hand and lower arm into the glove. When the strap 32 is pulled radially around the glove, the Velcro®-type loops 28 on the lower surface of strap 32 engage the Velcro®-type hooks 30 positioned on the upper surface of the forearm. The Velcro®-type strap 32 provides a wide range of adjustment.

[0026] Cross-section FIG. 5 shows in detail the operation of strap 18. The user, having inserted his hand into the glove, passes strap 18 through buckle 24 and then back again towards the glove, so that the loops 28 in strap 18 engage the hooks 26 on the outer portion of the glove.

[0027] FIG. 5 also shows the cross-section of the flexible chambered container 40 when positioned inside the receiving pocket 20 of the present invention.

[0028] As can be seen, the weighted glove of the present invention is capable of securely holding the weights to the wearer’s arm without impeding the ability of the hand to grasp and manipulate objects or to participate in high-impact physical activities.

[0029] The glove is more comfortable to use than other gloves in the prior art that extend further up the forearm or that locate the weights on the hand or fingers.

[0030] While this invention has been described with reference to the details as set forth above, it is not limited to the specific structure as disclosed and the invention is intended to cover any modifications on changes as may come within the scope of the following claims.

1. A device for conditioning arms and upper body muscles comprising:
   (a) an unweighted glove section,
   (b) a forearm section, said glove and forearm sections comprising one or more pliable members; and
   (c) a weight comprising a plurality of weights located, attached to or integrated with said forearm section.

2. The device of claim 1, wherein said weight is attached to said forearm section by a pocket, located contiguous to said forearm section, said forearm section receiving and holding said weight.

3. The device of claim 1, wherein said weight comprises a plurality of objects enclosed by a pliable material, such that said weight is flexible and is able to conform generally to the shape and dimensions of the wearer’s wrist or forearm.

4. The device of claim 3, wherein said plurality of objects consists of iron sand or some similarly dense material.
5. The device of claim 1, further comprising a fastening member wherein said fastening member comprises one or more adjustable straps that connect one side of said wrist and forearm sections to the other side of said wrist and forearm sections.

6. The device of claim 1, wherein said fastening member comprises one or more zippers that connect one side of said wrist and forearm sections to the other side of said wrist and forearm sections.

7. A device as in claim 1, wherein said glove section comprises tubular closed-ended finger receiving members.

8. A device as in claim 4, further comprising:
   (d) a securement band extending around said weight.

9. A device as in claim 8, wherein said securement band extending around said weight extends flexibly around said weight.

10. A device as in claim 9, further comprising:
    (e) a forearm securement strap disposed on said forearm section, said weight being positioned between said forearm securement and said glove section.

11. A device as in claim 1, wherein said forearm section is of a length sufficient to extend from said glove section over less than half of the forearm of a user.

12. The device of claim 3, wherein said fastening member comprises one or more adjustable straps that connect one side of said wrist and forearm sections to the other side of said wrist and forearm sections.

13. A device for conditioning arms and upper body muscles comprising:
    (a) an unweighted glove section,
    (b) a forearm section, said glove and forearm sections comprising one or more pliable members;
    (c) a weight comprising a plurality of weights located, attached to or integrated with said forearm section; and
    (d) a fastening member, said fastening member comprising at least one adjustable strap that extends around said weight, whereby said weight is comfortably and securely secured to the wrist of a user.

14. The device of claim 13, wherein said weight comprises iron sand or some similarly dense material.

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