This invention relates generally to skip ropes and more particularly to a skip rope handle having a weight thereon for the development of the muscle structure of the hand, wrist, and forearm.

A skip rope will develop the muscles of the hand, wrist and forearm to a limited degree but is principally designed to teach coordination and to increase the endurance of the person exercising.

The principal object of this invention is to carry forward the development of the muscles of the hand, wrist, and forearm to increase their size and strength, as well as their ability to withstand further endurance.

One who frequently exercises with an ordinary skip rope does not increase the strength of his grip, nor does he develop the muscles surrounding and controlling the bones of the hand and wrist. With these sections undeveloped and with the shoulders and biceps highly developed, the trainee is apt to injure his hands and wrists because they, being weaker, are required to transmit blows while boxing, or in other forms of sports, they are readily broken as they are too weak for the development of the rest of the body.

The purpose of the weighted skip rope handles is to provide an exercising device which will develop the forearm, wrists and hands, and at the same time maintain the coordination of the legs and feet to maintain and further develop the muscles and their endurance. By starting with relatively light weights on the rope end of the skip rope handle grips one is enabled to increase the size and strength of these muscles. By further increasing these weights the size and strength of the muscles increases together with endurance. This is not attainable by other ordinary forms of exercise such as weight lifting, since this form of development has a tendency to develop other muscles in the back as well as the wrist and forearm, which muscles a fighter does not wish to develop.

The structure to promote the development of the forearm, wrist, and hand is in the form of a skip rope handle having a grip portion with a weight on the rope end of the handle. This weight being at the end of the handle provides a lever acting means to develop the hand, wrist, and forearm along with the biceps, so that they may be equally developed and employed with each other without one being too weak to deliver the blow of the other.

Another object is the provision of an exercising medium that will develop the hands, wrists, and forearms without overdeveloping the muscles of the chest and the muscles of the back which when overdeveloped retard the speed and reduce the power of the blow that can be delivered through the wrists and hand as in the sports of boxing, tennis, golf, baseball, basketball, and most other sports.

To attain development of the hands, wrists, and forearms, a weight is placed on the rope end of the hand grips holding the skip rope. These weights may be permanently attached to the grip handles when case different sets of grip handles will be desired to increase the development of the muscles. If the weights are removably mounted on the grip handles of a skip rope, then they may be increased gradually to develop the muscles of the hands, wrists, and forearms.

It is preferable to place these weights on the rope attaching end of the skip rope handles to provide a definite lever arm relative to the wrist. If the weights are not symmetrical to the axes of the grip handle they will provide a different exercise than a weight symmetrical to the axis of the grip handle, so it is preferable to be able to shift the center of the mass of the weight relative to the skip rope handle regardless of whether or not the weight is attached at the axis of the grip handle. In this regard it is preferable to employ an orthopedic grip on the handle.

That is, a grip of the person who is to use the exercising device. An orthopedic grip of general characteristics is better than a smooth but symmetrically formed grip handle. The orthopedic grip offers greater resistance against rotation of the grip handle while exercising. This concentrates the exercise to those muscles in the hand, wrist, and forearm controlling the flexing of the wrist without overdeveloping the gripping muscles themselves. On the other hand a smooth handle of smaller diameter gets slippery and causes the grip muscles to incite to in exercising in attempting to prevent the weighted or unbalanced mass from rotating in the hands while exercising with these weighted skip rope handles.

Other objects and advantages appear hereinafter in the following description and claims.

The accompanying drawings show for the purpose of exemplification, without limiting the invention or claims thereto, certain practical embodiments of the invention wherein:

Fig. 1 is a side elevation of a weighted skip rope handle wherein the weight is permanently attached to the handle.

Fig. 2 is an end view taken from the left of the structure as shown in Fig. 1.

Fig. 3 is a sectional view of a skip rope handle having weights adjustably secured thereto.

Fig. 4 is an end view of the structure as illustrated in Fig. 3 showing an eccentric weight.

Referring to the drawings, the skipping rope grip handle 1 is provided with a central portion of increased diameter 2, the opposite ends 3 and 4 being of reduced diameter, and the diameter of the section 3 adjacent to the rope attaching end is smaller than the diameter of the end 4. The outer end of the grip handle 3, adjacent to the end 4 is enlarged, as indicated at 5, to aid in holding the grip handle and preventing it from slipping from the hands of the operator, even though his muscles may tire. The flange 5 is even greater in diameter than the enlarged intermediate portion 2.

The rope attaching end of the grip handle 1 is provided with an enlarged weighted section 6. If the device is made of plastic or aluminum, weights may be inserted in a pocket in the structure, or they may be cast integral. In any event the structure as shown in Figs. 1 and 2 is provided with an integral weight mass wherein the weight 6 in the enlarged flange portion adjacent the rope attaching end is integral with the handle and is not changed. In order to have weights of different sizes a series of similar skip rope gripping handles having different size weights 6 should be employed to develop the muscles, which weights will be from that of a small order graduating in degrees to that of a large weight, as indicated at 6 in the drawings.

The rope attaching means is shown wherein the end of the rope 7 is encircled by an eye member 8 that terminates in the loop 9, and the loop 9 in turn passes through the eye 10 that is swivelled on the stem or threaded member 11, which is provided with a head 12 that prevents the swivel member of the eye 10 from coming off of the threaded member 11. The threaded member 11 is also
provided with a nut member 13 which may be employed to tighten the loop member 10 against the head 12, or to provide a fixed distance therebetween to allow for ample swiveling of the eye member 10.

The threaded member 11 extends into the threaded bore passage 14 through the weighted section 6 of the handle member 1 and is engaged and clamped by the set screw 15, which is threadably secured in a lateral bore 16 and is arranged to bear against the threaded member 11 to hold the same in its socket with the nut 13 against the outer face of the weight 6. The remaining portion of the threaded member 11 may extend into the bore 14, as indicated in Fig. 1.

As shown in Fig. 3, the weight member 18 is removable mounted on the threaded member 17 and the nut 13 when screwed tightly against the outer face of the weight member 18 holds the same against the weighted member 6.

The rope attaching means and the other parts of the skip rope handle in Fig. 3 are similar to that in Fig. 1, with the exception of the grip portion which in Fig. 3 as illustrated at 20 represents an orthopedic grip which defines the actual grip of the person who is to use the device and shows by means of the radial dividing cusps the divisions between the fingers of the person of the exerciser. These ribs of course do not extend between the fingers but merely initially divide the fingers and form the true orthopedic grip of the person. With this type of grip the device is difficult to rotate in the hands of the person of the wearer. A general orthopedic grip may be made to fit a class of persons rather than a specific grip of one individual.

When additional weights are required they may be applied in the form of discs as illustrated at 21 and 22. The removable weights 21 and 22 may interlock with each other, as illustrated by the hook member 23. Again, these removable weight members may be bolted together as illustrated by the bolt 24.

In the structure as shown in Fig. 4 the disc weight 25 is eccentric or concentrated at the lower end of the general weight member 6, thus providing a different type of exercise than that which would be obtainable from a symmetrically formed weight as illustrated in Figs. 1 and 3.

1. A skipping rope comprising a pair of stems, a swivel on one end of each stem, a rope connecting said swivels, a pair of handles, a hand grip on each handle, a metallic weight in the form of a flange permanently secured on one end of each handle, a passage entering through each metallic weight into each handle to receive a stem, and fastening means in each handle detachably securing each stem in its passage.

2. A skipping rope comprising a pair of stems, a swivel on one end of each stem, a rope connecting said swivels, a pair of handles, an independent metallic disc weight for each handle, each disc weight having an opening therethrough to receive a stem, a hand grip on each handle, a metallic weight in the form of a flange secured on one end of each handle, a passage entering through said flange weight into each handle to receive a stem, and fastening means in each handle detachably securing each stem in its passage, said swivels retaining said disc weights on each stem when secured to said handles.

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