WEIGHTLIFTING EXERCISE DEVICE

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4 Claims. (Cl. 272—84)

This invention relates to a weightlifting exercise device and particularly to a device of that sort which is worn on the shoulders during exercise to allow freedom of the arms for balance especially during those exercises known as barbell squats.

Barbell weightlifting is a common exercise and physical training procedure for body conditioning. Barbells are well known and consist generally of a straight metal tube supporting selective round weights attached at the end thereof. Various manipulations and procedures are employed in the use of barbells and weightlifting and one of these important exercises is the so-called squat wherein the barbell is held usually on the shoulders around the neck and the body trunk is lowered substantially vertically while the legs are bent at the knees and then back straight again and so on for as many times as conditioning allows. This procedure is not completely satisfactory for performing squats for a number of reasons principal among which is that the hands are not free either for balance or for protection nor can the weights be completely, accurately balanced on the shoulders causing irregularity in motion and unwanted instability. In addition, the weights are a little higher on the shoulders than is actually desired for balance and conditioning purposes but it is not possible with a barbell to position them conveniently in any other way. Therefore, there has been a need for quite some time for a simple and expedient barbell weightlifting device which makes it easy and convenient and safe to perform squats.

The present device provides such an arrangement.

Generally described, without restriction on the scope of my invention as defined in the appended claims, the present device comprises a substantially rigid metal shoulder or body frame which consists of a rectangular barbell support frame comprising four sides constructed from metal strap or similar material which may be adjusted if desired and having mounted thereon on opposite sides thereof a protruding barbell shaft or tube constructed from strong metal and being welded or otherwise securely and accurately attached to the frame. Conventional cylindrical barbell weights are attached on the shaft removable by means of the conventional barbell attachment collars. A pair of shoulder supports of identical construction are mounted rigidly on the frame in spaced relation and each shoulder support is constructed from strong metal strap or the like having a permanent curve in the metal and having the terminal ends attached as by screws, welded or otherwise to respective locations on the front and rear of the frame. Foam rubber, vinyl foam or other soft pads are attached on the underside of the curved portion of the shoulder members. The distance from the support portion substantially in the center of the curved portions of the shoulder members to the center line of the shafts supporting the weights is such that the weights are placed below the shoulders and beneath the straps allowing the arms to be extended out of the frame and held in a position desired such as straight out for balance or in an emergency to be extended out to shift the balance to recover from an off balance condition or to break a fall.

An object of this invention is to provide a weightlifting and barbell squat shoulder apparatus which allows the weights below the shoulders and under the armpits and frees the arms and hands.

Another object of this invention is to provide a weightlifting and barbell squat apparatus which provides weights spaced away from the body but supported entirely from the top of the shoulders and also allowing the arms to be free if desired.

Other and further objects and advantages of my invention will become apparent upon reading the following specification taken in conjunction with accompanying drawings in which:

FIG. 1 is a perspective view of the present invention in place on a weight lifter.

FIG. 2 is a perspective view of the device shown in FIG.

1 removed from the weight lifter.

Referring initially to FIG. 2 and then to FIG. 1 and to both figures as the specification proceeds, the entire barbell and weightlifting squat apparatus is designated as reference number 10 and consists essentially of a rectangular frame 12 constructed from metal or other durable material and comprising short side frame members 14, 16 and longer front and rear frame members 18, 20, all constructed from flat metal strap or other strong material of smooth construction and preferably painted or coated or plated to provide an attractive, rustproof and durable finish.

Attached respectively to the side frame members 14, 16 and protruding therefrom are weight support shafts or tubes 22, 24 of tubular metal construction similar to ordinary barbell tubes and provided with a plated or coated or other durable surface. Each of the members 22, 24 is welded at 26 to a respective side frame member 14, 16 so that the shaft 22, 24 protrudes in a straight manner perpendicular with the respective frame member 14, 16. Ordinary or conventional weightlifting weights 28 of cylindrical construction and provided with a center opening are mounted selectively on a respective shaft 22, 24 and held in place by conventional weightlifting collars 30, 32. Collar 32 is usually set in place at the occasion and permanently locked thereon by a removable adjustment screw 34 whereas collars 32 are easily removable by means of a screw member 36 which allows the collars to be removed easily and the weight 28 to be varied and adjusted by replacement with short side frame members of different sizes and weights.

The inside surface of both the front member 18 and the rear member 20 is provided with a plastic foam or foam rubber or other durable pad 38 which provides a soft surface that may contact the body during certain shifting without scratching or otherwise causing any injury to the body.

Referring to FIG. 1 for a description of the apparatus 10 in position, a weight lifter 40 with right and left shoulders 42, neck 44, head 46, trunk and chest 48 and arms 50 wears apparatus 10 in a manner to be described.

Attached on front frame 18 and rear frame 20 is a pair of opposed, identical shoulder support members 56 each constructed from a durable material and bent to form a curved shoulder support center portion 58 with opposed terminal ends 60, 62 attached respectively to front frame 18 and rear frame 20 by means of attachment screws 64 or any other suitable means.

In the operation of the weightlifting squat apparatus 10, the weight lifter 40 picks up the frame in any convenient manner with his hands with the device sitting on the floor substantially in the position of FIG. 2. He then raises the device over his head and lowers it down to bring the curved portion 58 in alignment with shoulders 42.

Pads 66 are foam rubber, plastic material or other suitable lining inside surface of the curved portion 58 of mem-
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3. In a weightlifting exercise apparatus to be placed on the shoulders of a weightlifter's body which has arms and arm pits and a front and a back: a frame positionable on the weightlifter's body to be supported and suspended from the shoulders, a pair of shoulder support members on said frame, the said frame being attached to said pair of shoulder support members on one side of said shoulder, said frame being attached to said pair of shoulder support members on one side of said shoulder at spaced locations provided with open spaces through which the arms may be extended for freedom of movement, said frame having a rigid side member rigidly mounted on each side of said body extending outwardly from said shoulder support members on each side and being located beneath the respective arm pits and normally between the body and the respective arm so that the arm is free to move, and removable weights attached on said frame and extending from said frame outwardly on opposite sides of the body and below said arm pits and beneath said arms.

4. In an exercise weightlifting apparatus: to be placed on the shoulders of a weightlifter's body which has arms and arm pits and a front and a back: a straight frame adapted to be positioned across the body of a weightlifter and below the shoulders, and having side frame members located beneath each arm pit, weight support members extending from and attached to a respective side frame member of said frame and extending from opposite sides of the weightlifter's body, removable weights on said weight support members, a pair of straight shoulder support members attached on said frame and having shoulder support portions positionable on the shoulders of the weightlifter to support the frame therebelow and to support the weights on the frame, said shoulder support members being attached to the frame at spaced locations and when in place on the weightlifter positioning the frame with the weights below the shoulders and beneath the arm pits of the weightlifter, there being spaces defined by said shoulder member and said frame through which the arms of the weightlifter may be inserted to allow the arms to be extended from the body and to free the arms for movement, balance and protection in the event of a fall.

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