April 17, 1962 B. F. ALBITZ 3,030,109

PUNCHING BAG EXERCISING APPARATUS

Filed Sept. 23, 1959

FIG. 1

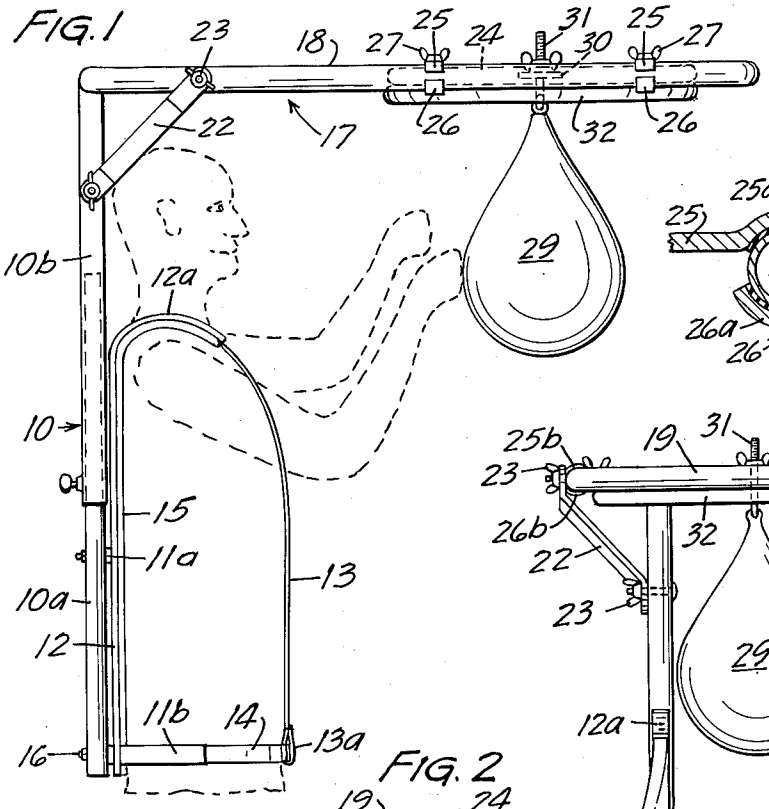


FIG. 4

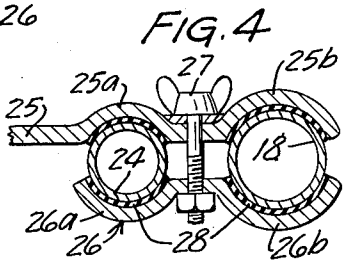


FIG. 3

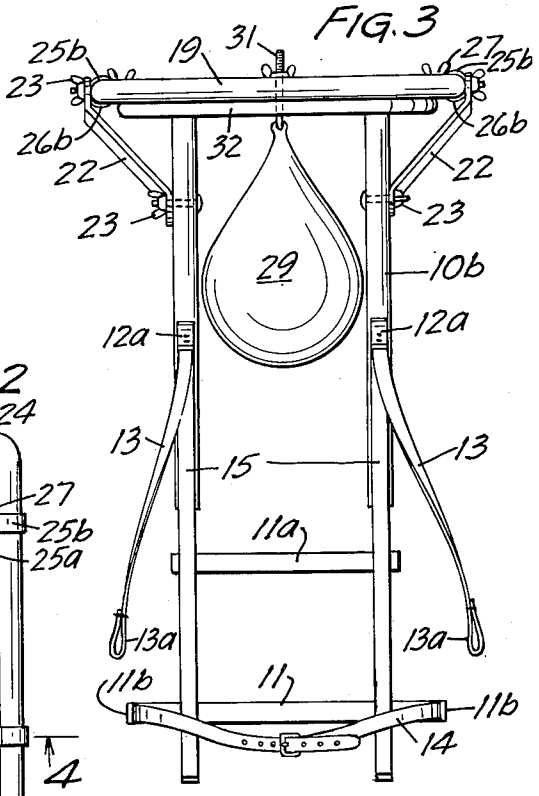


FIG. 2

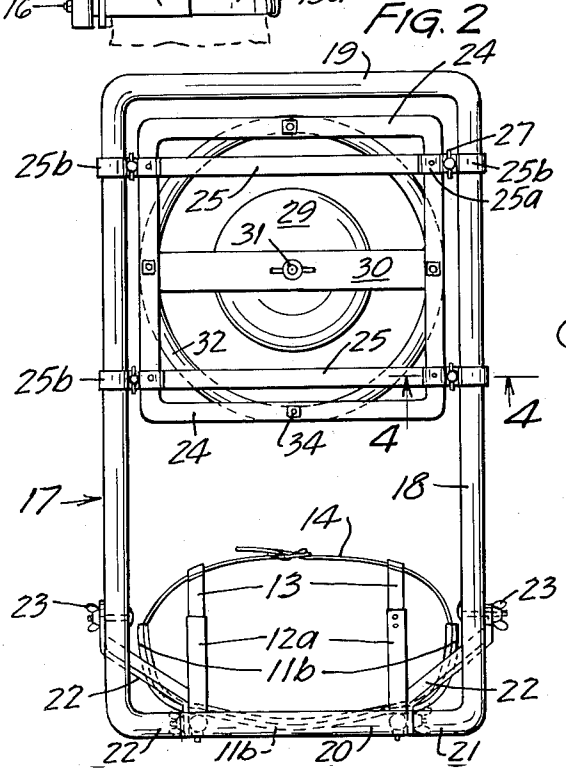
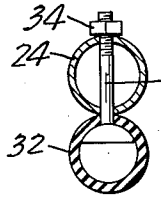


FIG. 5



INVENTOR
BENJAMIN F. ALBITZ
BY
Williamson, Schroeder & Palmatier
ATTORNEYS

United States Patent Office 3,030,109 Patented Apr. 17, 1962

3,030,109

PUNCHING BAG EXERCISING APPARATUS

Benjamin F. Albitz, The Highlands, Mound, Minn.

Filed Sept. 23, 1959, Ser. No. 841,848
1 Claim. (Cl. 272—78)

This invention relates to athletic equipment and particularly to a portable collapsible self-mounted punching bag apparatus especially suitable for developing coordination between the various parts of the body.

An important object of my invention is a novel punching bag apparatus which is adapted to be mounted on and move with the user.

Still another object is a punching bag device of the class described which is especially effective as an all-around body conditioner for developing coordination between the various parts of the body and operating to condition all of the major parts of the body simultaneously.

Still another object is a punching bag exerciser of the class described which is especially effective in "shadow boxing" since it enables the user to always have a moving target before him and within reach instead of attempting to box with a shadow, reflection or imaginary object.

Still another object is a punching bag exerciser of the class described which is particularly effective in strengthening the muscles of the eyes and in coordinating the central nervous or motor system to sustain and maintain fixation of the eyes to improve the powers of concentration of the user.

Still another object is a punching bag apparatus of the class described which is substantially noiseless and free of vibration which enables the same to be used in any room of the house without disturbing persons in other parts of said house such as would be the case were the punching bag to be mounted on the wall or ceiling of the house as in the conventional manner.

Another object is a punching bag exerciser of the class described which is capable of readily collapsing to a small compact package for ease in transportation, carrying, shipment and storage and which is readily unfolded and set up with a minimum of effort when the same is to be put to use.

A still further object is a punching bag exerciser of the class described in which the bag is suspended in front of the user from a portable frame mounted on the torso of the user and extending over his head.

Still another object is an exercising apparatus of the class above described in which the punching bag is adapted for vertical and horizontal adjustment to accommodate itself to the individual desires and physical characteristics of the user and in which the frame itself is vertically adjustable relative to the user to control the distribution and balance of the supporting frame to a position which is most comfortable and most beneficial to the user.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts, and in which:

FIG. 1 is a side elevational view of the apparatus of my device mounted on the torso of a user;

FIG. 2 is a top plan view;

FIG. 3 is a front elevational view;

FIG. 4 is a cross sectional view on an enlarged scale taken on the line 4—4 of FIG. 2; and

FIG. 5 is a detail cross sectional view on an enlarged scale of the bumper fastening means.

Referring to the drawings for a more detailed description of a preferred embodiment of my invention, the supporting frame includes a vertical frame 10 having vertical side standards consisting of tubular longitudinally adjustable telescopically engaged lower members 10*a* and upper members 10*b* fastened together by suitable fasteners. This enables the bag supporting platform hereinafter to be described to be vertically adjusted as to height and permits the weight and balance of the entire structure to be adjusted since the relative height of the bag supporting platform and the bag itself above the user is important as to balance and comfort particularly when the user moves into a position other than upright, that is, into a position of twisting or bending motion.

The lower members 10*a* are interconnected by means of rearwardly bowed cross bracing members 11 and 11*a* which are curved in a fashion to conform generally to the curvature of the back to enable the frame to be comfortably contoured and fitted thereto. The lowermost cross member 11 is provided with forwardly curved end portions 11*b* which are adapted to partially encircle the torso to prevent vertical side to side tilting of the supporting frame during use and lend greater stability thereto. The lower standard members 10*a* have mounted on the front face thereof hangers 12 having forwardly and downwardly curved hook portions 12*a*, the curved portions 12*a* being adapted to be hooked over the shoulders of the user to rest comfortably on the same and support the entire bag supporting frame on the user thereby. The upper outer end of the hook portions 12*a* have attached thereto sturdy flexible leather straps 13 which are preferably looped at their lower ends as at 13*a* for receiving a conventional leather belt 14 the ends of which are secured to the end portions 11*b* of the cross member 11, the straps 13 and 14 and hanger element 12 providing a sturdy and convenient harness for mounting the bag supporting frame or structure on the torso of the user.

The front face of the hanger element 12 is preferably lined with suitable cushioning material such as foam rubber or the like indicated by the numeral 15 and the lower legs of the hanger elements 12 are preferably provided with shock absorbers or cushion elements 16 disposed between the hanger and the standard 10*a* to reduce the vibration and shock transmitted by the punching of the bag to the back of the user. It should also be noted that the entire frame structure is preferably of strong light-weight tubular material such as aluminum.

The horizontal bag supporting portion of the frame comprises a generally rectangular frame 17 including side members 18, a front member 19 and a back member 20 which is pivotally mounted for free turning movement on and about the lateral portions of the corners 21 attached to the sides 18, the upper ends of the standards 10 being secured to the back member 20. The vertical frame 10 and horizontal frame 17 are detachably maintained generally perpendicular to one another during use by means of a pair of diagonally disposed bracing members 22, the ends of which are secured to the frames by means of suitable fasteners 23 to provide the rigidity and relative perpendicular relationship desired.

An annular tubular bag supporting frame 24 is disposed within the horizontal frame 17 adjacent the forward end thereof and is suspended therefrom by a pair of rigid parallel spaced apart suspending strips 25, the ends of which are provided with concave portions 25*a* and 25*b* which lap the bag supporting platform 24 and side members 18 of the frame 17 as best seen in FIG. 4. The strips 25 are detachably fastened to the frames 17 and 24 by means of a clamping member 26 disposed on the underside of said frames and having concave portions 26*a* and 26*b* receiving the frames 24 and 18 respectively, the members 25 and 26 being drawn together into clamping relationship with the frames by means of a connecting

bolt 27 vertically disposed in the space separating the two frames. Suitable lining 28 is provided between the members 25 and 26 and the frames to reduce noise and vibration. This arrangement not only secures the platform or frame 24 to the supporting frame 17, but also readily permits the platform to be horizontally adjusted towards and away from the user to adjust the distance between the punching bag and the user by simply loosening the connecting bolts 27.

An inflated punching bag 29 is suspended from a transverse cross brace 30 secured to the platform 24 by means of a suspension or hanger element 31 which may consist of an elongate eye bolt which may be readily raised or lowered to adjust the height of the bag with relation to the user as desired. The lower face of the platform 24 has mounted thereon a circular rebound ring or bumper 32 preferably of a somewhat resilient material such as rubber which is capable of reducing as much as possible the noise and vibration of the bag as it is oscillated by the repeated hitting thereof by the fists of the user, and to reduce as much as possible the attendant wear on the bag. The bumper 32 is preferably mounted on the frame or platform 24 by means of fasteners 33, the heads of which are disposed interiorly of the bumper, the shank of which engages the bumper wall and frame 24 and is secured thereto by means of a nut 34. This arrangement permits the bumper to present a completely smooth unobstructed surface to the bag to prevent undue wear on the bag which would occur if the fasteners were exposed to the action of the bag.

In use, the frame 10 is simply mounted on the torso of the user by hooking the curved portions 12*a* of the hanger elements 12 over the shoulders of the user and suitably fastening the leather belt 14 about the waist in conventional fashion. The horizontal frame 17 will have been previously fixed with relation to the vertical frame 10 by the securement of the diagonal braces 23 and the apparatus is ready for use. It is obvious that once mounted, the punching bag can be operated in the usual fashion provided for punching bags which are normally mounted on a fixed support such as a wall or ceiling. However, because of the self-mounted nature of the supporting structure of the bag, the bag is always in front of the user regardless of how or where he moves and is always within the reach of his fists which permits him to employ the bag while he is shadow boxing to make more effective his shadow boxing and make sharper his coordination and also to make the shadow boxing more interesting since it is difficult for a boxer or trainee to maintain interest in conventional shadow boxing for a sufficient length of time to permit the same to be as effective as it might otherwise be.

In addition to the usual advantages associated with the punching of the bag and the additional advantage of having the punching bag always present while shadow boxing, the portable self-mounted arrangement of the frame also permits the user to perform different types of leg exercises such as skipping, jumping and squatting to exercise the leg muscles in coordination with the punching of the bag to not only improve strength and improve muscular tone and condition but primarily to coordinate all of the members of the body. In addition, the manner in which the supporting frame is mounted on the torso of the user provides a very beneficial result to the torso of the user particularly when he chooses to bend and twist, dodge and so forth as in shadow boxing since the weight of the structure and the balancing thereof places a beneficial strain on the torso muscles of the user as he

bends and twists to definitely and positively condition the same.

As previously pointed out, the punching bag exerciser of my invention not only improves the muscles and the coordination between the body members but also improves the vision of the user by coordinating the central or motor nervous system which maintains control over a person's ability to sustain and maintain fixation of the eyes on any given subject and to concentrate for a considerable length of time. This is particularly beneficial to people who have had trouble previously in focusing their attention on any one subject for any reasonable length of time and is also particularly beneficial to school children who have in the past failed to concentrate on their studies sufficiently to get the most out of their school work and to obtain grades comparable with their capabilities.

In addition to the above recited advantages, it should also be noted that the foldable or collapsible nature of the frame permits the horizontal frame portion 17 and vertical frame portion 10 to be swung or folded towards one another into a compact package for ease in transporting and storing. The adjustable features of the frame and bag permit the entire structure to be balanced and positioned as desired. Also, the vertical adjustability of the bag permits variation in the rebounding movements of the bag due to the particular configuration thereof, and also enables the wear to be more evenly distributed on the bag by varying the portion of the bag surface which strikes the bumper.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of my invention.

What I claim is:

An exercising device comprising in combination an oscillatable punching bag and a supporting frame therefor, said supporting frame including a vertical frame portion comprised of cooperatively and adjustably interconnected upper and lower sections adapted for relative vertical movement therebetween to permit raising and lowering of said upper section with respect to said lower section, means carried by said lower section for mounting said supporting frame on the rear of the torso of a person using the device, a horizontal frame portion pivotally interconnected to the upper section of said vertical frame portion for relative pivotal movement of said frame portions into collapsed side-by-side relation, means for maintaining said frame portions in extended unfolded generally perpendicular relationship to one another, an annular bumper member adjustably mounted on said horizontal frame portion for movement towards and away from the user, and a punching bag suspended in concentric relation from said bumper member and being movable therewith for selectively varying the distance between said punching bag and the user while maintaining said bumper member and said punching bag in predetermined fixed position relative to each other.

References Cited in the file of this patent

UNITED STATES PATENTS

1,973,198	Bergmann	Sept. 11, 1934
2,400,105	Costello	May 14, 1946
2,764,412	Dunham	Sept. 25, 1956

FOREIGN PATENTS

7,496	Great Britain	1910