The present invention generally relates to a device and method for using the same that simulates sparring with a live partner. More specifically, the device operates as a striking pad and/or defensive maneuvering tool to safely harden a user's body. The device strikes a user at targeted nerve areas on the user's forearms, torso, and/or thighs.
BODY HARDENING & CONDITIONING
CROSS REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable.

FIELD OF THE INVENTION

[0002] The present invention generally relates to a device and method for simulating sparring with a live partner. More specifically, the device operates as a striking pad and/or defensive maneuvering tool to safely harden a user's body. The device strikes a user at targeted nerve areas on the user's forearms, torso, and/or thighs. The user may defend blows from the machine at these key points and has the option to strike back. The device includes a fixed or rotating vertical column connected to a fixed base. The vertical column has three orthogonal supports that hold three separate cylindrical bodies. Each cylindrical body has at least two protruding arms resting on a rotary device and rotates at least forty-five degrees (45°) in either direction normal to the vertical column. The cylindrical bodies are mechanically driven to initiate contact to a user's body, where key nerve areas are struck by the device.

BACKGROUND OF THE INVENTION

[0003] Martial artists train and stay in shape by fighting one another in sparring matches. Sparring with a live partner has many advantages, including but not limited to: the possibility to develop fighting sequences, timing and balance techniques, and new modes of performance; the low risk of injury; opportunity to practice throwing and falling skills; developing strike and defense timing; simulating strikes and kicks with real-fight power and speed; raising sensitivity to opponents; and sparring allows a fighter to increase their endurance and tolerance for pain.

[0004] Many martial artists seek alternative methods for increasing their endurance and tolerance for pain outside of sparring events. Martial artists increase their tolerance for pain through alternative, and often dangerous, methods that harden the body. A martial artist seeks to harden areas of the body including but not limited to: ribs; stomach; arms; hands; shoulders; kidneys; and back. They strike hard objects to “deaden” certain never/pain receptors in the body. Minor injuries from the strikes create micro fractures in bone and damage tissue near nerves, where during the healing process calcification and scar tissue form respectively. Calcification and scar tissue gives the body a harden feel. Not done properly these techniques can cause serious injury to the fighter.

[0005] To that end, there is a need for a device that facilities body hardening for martial artists in a safe manner while simulating the advantages of having a live sparring partner. Key nerves are repeatedly struck by prongs/arms protruding from the device. The device hardens tissue around key nerve areas including without limitation: the radial nerve (top of the forearm); the ulnar nerve (underside of the forearm); the peroneal nerve (outside of the thigh); the femoral nerve (inside of the thigh); and the abdomen (mid torso).

SUMMARY OF THE INVENTION

[0006] One aspect of the invention provides for a device and method for using the same that simulates sparring with a live partner, wherein the device comprises: a base having a metal pole with three orthogonal supports and a floor base; three cylindrical bodies, each having two protruding arms; and at least one handle attached to the back orientation of at least one cylindrical body to rotate any or all cylindrical bodies of b.

[0007] Another aspect of the invention includes a base having a metal pole with three orthogonal supports and a floor base; three cylindrical bodies, each having two protruding arms; and at least one chain that encompasses at least one cylindrical body of b), wherein pulling the chain rotates any or all cylindrical bodies of b).

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The FIGURE discussed below is non-limiting example of the present invention and is not meant to serve as a limitation thereof.

[0009] FIG. 1 shows a front view of the machine in three dimensions.

DETAILED DESCRIPTION OF THE INVENTION

Definitions

[0010] To detail the present invention, the following non-limiting terms are used:

[0011] The term cylindrical body generally refers to a piece of cut sheet metal that has been rolled into a hemispherical shape, where the edges are fastened to form a cylindrical body.

[0012] The term base generally refers to a combination of a vertical column being a metal pole located at the center of the device, being attached to a floor base.

[0013] The term orthogonal support refers to a metal bar attached to the metal pole if the x direction and an l. shape bar attached to the pole in the z direction.

General Embodiment

[0014] From this point forward, the following words will describe a method of making the present invention. However, these words are not a limitation on the scope of the present invention, but are shared to illustrate certain embodiments thereof.

[0015] It is within the scope of the present invention where the device 10 is a machine that simulates sparring with a live partner. The user defends strikes from the device 10 at targeted nerve areas on the user's forearms, torso, and/or thighs. The device 10 includes a fixed or rotating vertical column 12 connected to a fixed base 13. The vertical column 12 has three orthogonal supports 15a-c that hold three separate cylindrical bodies 11a-c. Each cylindrical body 11a-c has at least two protruding arms 14a-c and rotates from about sixty degrees (60°) to about ninety degrees (90°) in either direction normal to the vertical column 12. The cylindrical bodies 11a-c are mechanically driven to initiate contact to a user's body, where key nerve areas are struck by the device 10.

[0016] The Base and Supports

[0017] It is within the scope of the present invention where the base consists of a vertical pole 12 attached orthogonal to a floor base 13. Together the vertical pole 12 and the floor base 13 comprise the base. From ground level, the base has a height ranging from about five feet (5') to about six and one half feet (6.5'). The vertical column 12 is preferably a metal pole having a diameter of at least two inches (2") and a length ranging from about five feet (5') to about six and one half feet
(6.5") tall. One end of the metal pole is inserted and attached to the floor base 13 and extends vertically to form the floor base 13.

[0018] In one embodiment of the invention, the end of the pole 12 that is inserted into the floor base 13 is attached to a rotating element, a non-limiting example being rotary bearings and the like. The floor base 13 is designed to accept the vertical pole 12 with at least one rotating element and has a weight and dimensions such that the pole 12 will remain stable during use. In another embodiment, the end of the pole 12 that is inserted into the floor base 13 is fixed and cannot rotate.

[0019] It is within the scope of the present invention wherein the metal pole 12 has three metal supports 15a-c attached to it. The metal supports 15a-c are evenly spaced along the vertical y axis of the pole 12. Each metal support 15a-c has at least two elements, a cylindrical metal rod and an L shaped bar. Each cylindrical metal rod has a diameter of about 1/4" that is about 20" in length, where protruding cylindrical studs are located about 4" from either end of the rod. Each L shaped bar includes a small support block that is at least 1" in from the bent portion of the bar.

[0020] From three dimensions, all metal rods are attached to the pole 12 in the x direction, the front orientation of the device 10. Each L shaped bar is attached to the pole 12 along the z direction and is orthogonal to each metal rod attached to the pole 12 in the y direction and the pole 12 in the y direction. The L shaped supports represent the back orientation of the device 10.

[0021] Cylindrical Bodies and Arms

[0022] It is within the scope of the invention where there are three cylindrical bodies 11a-c mounted onto the three orthogonal supports 15a-c about the vertical pole 12. There is a top 11a, mid 11b, and bottom cylindrical body 11c, where each is equally spaced/separated about the vertical column 12 by about 2". Each cylindrical body 11a-c is initially cut from a piece of sheet metal that is ½" thick with dimensions of 12"(w)x18"(l). After cutting, each plate is rolled by methods known in the art to a radius of at least 20.25".

[0023] The height of each rolled plate is at least 18" from end to end. Each rolled plate has a non-continuous cylindrical shape and is closed to form a full cylindrical body by fastening latches's tack welded to the outer wall of the plate. The latches are of the draw non-locking type and are located on the back of each body.

[0024] The cylindrical bodies 11a-c are mounted to the pole 12 by setting the base of a body 11a-c on any orthogonal support 15a-c located on the vertical column 12 and fastening the latches located on the back of a cylindrical body 11a-c, where the vertical column 12 penetrates the open center of each body 11a-c. Once mounted each cylindrical body 11a-c can rotate individually or in concert when striking a user.

[0025] At front orientation, the top 11a and mid 11b body have at least two protruding arms 14a, 14b that are at about a 40° angle normal to the vertical column 12. Each arm is at least 14" long and is attached by at least four ¼"x1" bolts to hold them in place. Each arm is detachable by removing the screws, which makes an armless body and converts the device 10 into a punching apparatus.

[0026] The bottom body 11c has at least two protruding arms 14c that are at a 40° angle normal to the vertical column at front orientation. In one embodiment of the invention, the bottom body 11c has a third detachable arm that is centered between the at least two protruding arms 14c.

[0027] How the Device Rotates

[0028] Each body 11a-c is designed to rotate separately or in concert with other bodies. In one embodiment of the invention, rotation is accomplished by using hooks, pulley handles, a bicycle chain, and proper lubrication about the body's 11a-c base and each orthogonal support 15a-c. There are at least three hooks tack welded to the outer lower surface of each body 11a-c. Each hook is semi-hemispherical and has a diameter of at least 1" and located from about 3" to about 5" from the bottom of each body 11a-c. Two of the hooks are located just beneath the protruding arms 14a-c and one hook is centered between the two.

[0029] The bicycle chain contains sprockets having ½x½" sprockets, 7.8 mm pin length, and a nickel finish. The bicycle chain is long enough to encompass the diameter of each body 11a-c and with enough remaining chain to adequately rotate the device 10 from the rear orientation when pulled with affixed handles. The bicycle chain is placed through the hooks and is secured to each hook. Each free end of the bicycle chain is connected to a handle. Hence, pulling the chain at the ends will cause the each body 11a-c to rotate on its base with proper lube.

[0030] For moving each body 11a-c in concert, a thin rod/durable string goes through corresponding holes at the ends of the chain at the back orientation. Thus, coupling all chains associated with the top 11a, mid 11b, and lower 11c bodies with a rod/durable string allows the device 10 to be rotated in concert when a pair of handles located at mid body 11b are pulled.

[0031] In another embodiment of the invention, the bottom of each body 11a-c is fitted with a circular rotating bearing that fits flush onto the orthogonal support 15a-c. A rotating handle is mounted on the rear of the mid body 11b. The handle extends from about twelve inches (12") to about fifteen inches (15") from the rear of the mid body. A mechanism allows for the handle to be individually or simultaneously connected to each bearing located at the bottom end of each body. When the handle is rotated to the right or left direction, the body rotates respective to the amount of force exerted upon the handle. In the alternative, the machine may be rotated manually by human force or by a low powered motor.

[0032] The present invention is not limited by the words used herein. Without departing from the spirit of the present invention, the methods of making and using a sparring apparatus may take many forms. Therefore, all changes and modifications contemplated by one of ordinary skill in the art are within the scope of this invention.

What is claimed is:

1. A body hardening & conditioning sparring device, comprising:
   a) a base having a metal pole with three orthogonal supports and a floor base;
   b) three cylindrical bodies, each having two protruding arms; and
   c) at least one handle attached to the back orientation of at least one cylindrical body to rotate any or all cylindrical bodies of b).

2. A body hardening & conditioning sparring device, comprising:
   a) a base having a metal pole with three orthogonal supports and a floor base being rotated by a motor;
   b) three cylindrical bodies, each having two protruding arms; and
c.) at least one chain that encompasses at least one cylindrical body of b.), wherein the motor rotates any or all cylindrical bodies of b.).

3. A body hardening & conditioning sparring device, comprising:
   a.) An automated sound device that speaks boxing counts and moves;
   4. A water hydration tube to pump water out as a means to cool the trainer:

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