An adjustable sports practice net provides a ball rebounding flat net or nearly flat net target area surrounded by a large rebound net area. Target poles and a target net may simulate a full size sports net. End posts are sunk into the ground or attached to external vertical structures. Flexibility in setting up the sports practice net enables it to fit within a given space available. The target area is adjustable to position in alignment with outside end posts or positioned at a range of distances set back from the end posts to tighten the net between the target frame and the outside end posts and frame. Various rebound angles may be set up.
SPORTS PRACTICE REBOUND NET

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable.

THE NAMES OF THE PARTIES TO A JOINT RESEARCH OR DEVELOPMENT


BACKGROUND OF THE INVENTION

[0004] 1. Field of the Invention

[0005] The present invention relates to a recreational apparatus for rebounding soccer balls, lacrosse balls, field hockey balls or similar objects and particularly to a tensioned net means whereby a ball or similar object thrown or kicked against will be returned in the general direction from which it arrived; a recreational sporting apparatus of vertical and horizontal posts with multiple nets tensioned on all four sides inside each open area with elasticized cord for the purpose of rebounding soccer, lacrosse, field hockey balls and/or objects particular to other sports; wherein the multiple nets—tensioned by elastic cord will vary in strength and quantity required to maximize the rebounding results depending on which ball or object and which sport is being played—will in total be significantly larger than the actual sport's goal size area by extending the width on both sides and taller over the top of the goal size target area in proportions to best suit the sport, so that generally proportions will be approximately double in height and 30% to 100% of goal width wider to the left and right so that the rebounding apparatus will effectively allow live game-like rebounds of errant shots for the purpose of increasing player skill significantly, wherein each apparatus with its pole frame (generally permanently installed into the earth with deep cemented holes) and multiple tensioned nets will be specifically designed for each specific sport—and in the case of soccer where goal size varies by age the units will be different to match each appropriate size, and because the units will need 4 to 6 poles on average, the vertical poles can be installed at differing angles from the flat simulated net target area to best suit the users preferred needs and to accommodate whether the particular unit will be used by one person at a time or multiple people at one time.

[0006] 2. Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98

[0007] A major drawback with using actual size soccer nets for practice or simulated sports net size targets is that when the target is missed left or missed right or missed over the top, it is necessary for the person practicing to go after the ball each time which may be sixty yards past the practice net with a hard shot. Practice nets that do not rebound the ball also require going in to retrieve the ball even when it lands in the actual or target net, thereby limiting the amount of time spent actually shooting the ball at the target.

[0008] When soccer players are viewed in a typical soccer environment they rarely shoot at the net in favor of passing, ball handling and dribbling because the risk of shooting is retrieving—over and over again. In some environments the risk of missing is enormous because missing the net or target device requires players to go down hills, into woods, into bushes, etc. But even just missing the net causes the constant slow jog to retrieve the ball by any player willing to risk the shot. However even when a player hits the net and scores on his practice shot he has to jog to the net and go through the opening and into the back of the netting to retrieve the ball. This action is a constant issue everyday at millions of soccer fields across the world. The best players even seem to have is a wall somewhere they could shoot a ball against to create rebounds. Some people use the side of their garages, some the back of baseball dugouts, etc. The same applies to practice in other sports, such as lacrosse and field hockey.

[0009] The prior art soccer devices still fail to solve the rebound problem adequately and do not provide flexibility in size and positioning of the components of the devices to fit into a variety of areas with different distances between obstacles or area limits and provide for different rebound angles outside of the target area.

[0010] U.S. Pat. No. 4,948,147, issued Aug. 14, 1990 to Pallanca, shows a target for making training easier for players in sports such as soccer and the like, in which a ball is kicked or otherwise shot toward a net. The target comprises an adjustable main frame, a series of elastic nets, and a series of targets at which players aim to practice good scoring shots.

[0011] U.S. Pat. No. 4,693,472, issued Sep. 15, 1987 to Newman et al, claims a ball rebound net, for use in practicing tennis, cricket, baseball and/or other games. The net has a surrounding frame and a net capable of being mounted in the frame, the net being made of a tough, low-extensible material such as nylon with the threads of the net fastened together at their intersections, and a number of attachment clips for fastening said net to the frame, when the attachment clips are arranged around the frame, in such manner as to hold the net under tension sufficient to provide at least 80% rebound in a tennis ball when dropped upon a mid-portion of the net in horizontal position. The net is arranged so that the threads thereof, when the net is held in the frame under tension, extend from the bottom of the frame upwardly on opposite sides of a vertical center line at an angularity to that center line. That is to say, for a net with a square mesh the diagonals of the mesh extend horizontally and vertically when the frame is in an upright operational position. Preferably, the attachment clips permit of individual adjustment, or tuning, of the net tension at the different locations of the clips.

[0012] U.S. Pat. No. 7,270,608, issued Sep. 18, 2007 to Cho, is for a collapsible net for stopping flying balls and for installing on a floor includes a collapsible center coil loop, collapsible first and second side coil loops, a vertical fabric portion, top and bottom fabric portions, and top and bottom straps. The collapsible center coil loop includes a top part, a bottom part, and first and second side parts. Each side coil loop includes a top part, a bottom part, and inner and outer side parts. Each inner side part is connected to each side part of the collapsible center coil loop. The vertical fabric portion covers the openings of the coil loops for stopping the flying balls. The opening angle of the side coil loops are controllable. The propping device includes peeks and strings to fix the net to the floor.

[0013] Two U.S. Pat. No. 7,468,009 issued Dec. 23, 2008 and U.S. Pat. No. 5,654,791 issued Oct. 8, 1991 to Ball, provide a background shield for soccer practice. An individual player can practice kicking a soccer ball into the apparatus and have it bounce back in his or her general area. The lower area of the shield comprises a back panel and two side
panels connected at an angle to the back panel. Each panel is made of a sufficiently rigid material, such as plywood, to absorb the impact of the kicked soccer ball. Above the panels is netting, such as nylon netting, to guard against and intercept errant flights of the ball.

[0014] U.S. Pat. No. 5,290,043, issued Mar. 1, 1994 to Vidianic, illustrates a game for improving soccer skills which has a target preferably in the shape of a soccer goal. The target has a number of different sections which correspond to different point values based on the degree of difficulty in reaching the particular section. The section boxes are differentiated from one another in an easily identifiable manner, such as by color. Another element of game involves providing a mechanism for coordinating the different sections of the target to a particular section of the foot. This may be done, for example, by providing a shoe with different colored designations for various locations on the shoe. To play the game, one or more players take turns kicking a soccer ball from a set distance at the target. The player chooses which target section will be aimed for and takes notice of the color of the section. The player then kicks the ball with the portion of the shoe having the color which matches the chosen section. If the player hits the matching section of the target, the player receives the indicated value of points.

[0015] U.S. Pat. No. 6,659,892, issued Dec. 9, 2003 to Lytle et al., shows a kickback training goal. The practice goal apparatus comprises a box-like structure having an open face and providing plural interior faces adapted to rebound a resilient ball upon impact. The plural interior faces are set at selected angles such that the resilient ball, upon forcefully entering the box-like structure through the open face, from any direction will rebound in a manner resulting in forceful exit from the box-like structure back to the kicker. The apparatus has a hollow base that may be filled with water or sand to anchor it in place.

[0016] U.S. Patent Application #20040132558, published Jul. 8, 2004 by Rothman, describes a sports device consisting of rebound surfaces facing in different directions, which will rebound a ball or other projectile propelled in one direction and also rebound a ball or other projectile propelled in at least one other different direction. The multiple rebound surfaces may form an enclosure consisting of four vertical surfaces with a rectangular footprint, usable for soccer practice, with multiple net surfaces that rebound a soccer ball kicked in any direction from the interior of the enclosure, back to the kicker.

[0017] U.S. Patent Application #20080067751, published Mar. 20, 2008 by Hunt, discloses a random rebound sports training device which includes a pair of misaligned or offset net structures disposed on a frame that enable a projectile striking the net structures to rebound in a random manner. The structures are secured to a support frame such that the openings formed in the net structure, which are larger than normally utilized, are offset from one another. The offset of each of the net structures greatly reduces the potential for a projectile striking the device from contacting the same portions of the net structures, thereby causing the projectile to rebound in a random manner from the device. The frame on which the net structures are mounted can be easily configured between a use configuration and a storage configuration. Further, each of the net structures can be secured to a single support frame, or can extend from separate frames onto a target frame to provide multiple use sections on the device. The net is attached to the frame by means of a support line formed of a resilient and elastic material which functions to tension the net structure across the frame. The elasticity of the support line enables the net structure to deflect or deform when struck by a projectile.

[0018] U.S. Pat. No. 6,299,554, issued Oct. 9, 2001 to Sinclair et al., describes a throwing and catching net comprising a frame supporting a net having one or more layers of lattice adapted to cause a ball thrown at the net to rebound in an unpredictable manner, wherein in use, catching, throwing and/or batting skills can be practiced. The net is lashed to the frame with an elasmonic cord.

[0019] U.S. Pat. No. 5,772,537, issued Jun. 30, 1998 to Anderson et al., discloses a ball return device which includes a frame constructed from sections of plastic tubing joined by 90 degree elbows, forming a base and an elevatable portion. The elevatable portion of the frame is pivotally mounted to the base and adjustable positioned at a desired angle relative to the generally horizontal base by a pair of support members. The angle of the elevatable portion of the frame to the base determines the direction in which the ball is returned relative to a given incident path. The support members extend between the base and the elevatable portion of the frame, and each includes a smaller diameter tube slidably fitted into a larger diameter tube and selectively fixed at one or more plurality of preset lengths by a pin that passes through orifices formed in the two tubes. In one preferred form of the invention, a net having hexagonal openings is suspended within the elevatable portion of the frame by lengths of an elasmonic cord that connect a periphery of the net to the frame. The hexagonal openings deform around a ball impacting the net in such a way as to ensure that the ball is consistently returned at a predictable angle relative to the angle at which the ball impacts the net. The elasmonic cord can be tightened or loosened to adjust the tension of the net, thereby determining the relative force with which a ball impacting the net is returned. A friction clip attached to the elasmonic cord retains the selected tension.

[0020] U.S. Pat. No. 5,664,784, issued Sep. 9, 1997 to Redlich et al., indicates a rebound net for sports balls having a reinforced periphery. The net can be removably attached to a structure surrounding a door opening of a domestic garage. The net, while attached to the structure, substantially closes the opening. The periphery of the rebound net is removably attached to the structure by a first means of an eye bolt and a snap hook, a second means of a J-type screw hook and an adjustable strap and a third means of an anchor pin and a shock cord hooks. Tension on the rebound net is adjusted by the adjustable strap.

[0021] U.S. Pat. No. 7,462,114, issued Dec. 9, 2008 to Moller, Jr., puts forth a ball rebound assembly, comprising: a frame assembly, the frame assembly comprising: two frame verticals; two frame horizontals; four frame corners; an anchor assembly comprising two anchor poles; a resilient net stretched across the frame assembly; first hinges for adjustable attachment between the frame assembly and the anchor assembly; second slide hinges for adjustable attachment between the frame assembly and the anchor assembly at a spacing from the first hinges, wherein the first and second hinges determine an angle of the frame assembly and wherein an object that collides with the resilient net rebounds according to the angle of the frame assembly.

[0022] U.S. Pat. No. 6,935,971, issued Aug. 30, 2005 to Piras et al., concerns a training tool for ball games allows an optimal return of the ball. The tool includes a frame defining a rebound area, ground anchoring apparatus that anchors the
frame to the ground, elastic members which define a surface stretching on the rebound area, and positioning apparatus which permits adjusting the frame to a desired inclination.  

[0023] U.S. Pat. No. D420,714, issued Feb. 15, 2000 to Ivanov, is for the ornamental design for a ball return surface.  


[0025] U.S. Pat. No. 6,739,988, issued May 25, 2004 to Jensen et al, claims a portable recoil wall for sports ball practice which mentions that it may be mounted on a tree. In one embodiment, the recoil wall may include a target that is resiliently suspended on a foldable frame which may be supported in a plurality of inclined positions by a collapsible sustaining assembly coupled to the frame. A portable recoil target, capable of being removably attached to other structures such as netted goals and the like are also disclosed.  

[0026] U.S. Pat. No. 5,857,679, issued Jan. 12, 1999 to Ringel et al, shows a tennis rebound net using a tension adjustable elastic net material lashed with elastic cord to a frame structure. Adjusting the tension of the elastic netting material allows the user to alter the return speed of a ball hit against the rebound net.  

[0027] What is needed is a sports practice net which provides a ball rebounding target area and surrounding rebound area on the top and side wherein the target net area may be positioned out of alignment with the outside net poles for hitting within an area and for adjusting the rebound angle in the ball rebound net area surrounding the target net area.  

BRIEF SUMMARY OF THE INVENTION  

[0028] An object of the present invention is to provide a sports practice net which may be permanently installed and which provides a ball rebounding target area which may be a soccer net, lacrosse net, field hockey net or other sports net simulation target area and a wide and tall ball rebound area around the target area on both sides and the top with flexibility in setting up the practice net to enable it to adjust the rebound angle in the ball rebound net area surrounding the target net area by varying post positions.  

[0029] A full size soccer goal unit preferably has six vertical poles to provide the ideal configuration for centering balls to maximize constant action for one to three players and/or train forwards to become better goal scorers as follows:  

EXAMPLE 1  

[0030] In the full size soccer goal rebound net that has six vertical poles, the ideal configuration for centering balls to maximize constant action for one to three players and/or train forwards to become better goal scorers as follows:  

[0031] The two center poles will be square and back.  

[0032] The two poles outside of the center poles will be placed six inches forward toward shooters.  

[0033] The two outside poles will be positioned an additional 24 inches forward toward shooters.  

EXAMPLE 2  

[0034] In a nearly flat installation, the outside poles could be brought forward 12 inches toward the shooters and this will only very slightly center wide shots for developing multiple person drills and/or using the apparatus for midfielder and fullback clearing, shooting, and scoring drills taken from longer range and therefore less severe angling is needed to return live bounding balls in the general direction of the shooters.  

EXAMPLE 3  

[0035] Infinite angling from being even with the flat center goal target posts to more severe angles to meet different objectives of the users.  

[0036] The present invention provides a system of soccer, lacrosse, field hockey, and other sporting venues rebounding nets on a large scale to improve shooting, scoring and live rebounding ball handling skills. Because the ball bounds back to the practicing player(s) so the player has live bounding balls to control and position for repeat shooting or consistent one-time shooting drills without having to retrieve a ball constantly, his or her skill will improve dramatically.  

[0037] Because the minimum recommended size of the full size soccer system of the present invention is a permanently installed rebound net 44 feet wide by 16 feet tall with a center target area 24 feet wide by eight feet tall simulating an actual full size soccer net, a player can shoot towards the 'hot scoring zones' without worrying about constantly retrieving balls. Similarly a simulated lacrosse net, field hockey net, or other sports nets would have a full net size target area in the center with surrounding net posts and a flat net target rebound area and proportionally larger surrounding rebound area outside of the target to rebound balls missing the target net area whether left or right or over the top.  

[0038] A lacrosse rebound system (ideal unit is 2x tall and 3x wide). A lacrosse net is 6'x6' so the present invention would be designed the same way but would be 6 square sections—3 across on each of two rows—all 6'x6'. The center bottom 6'x6' section is the target area.  

[0039] The biggest benefit of the system is oversized rebounds will enable players to shoot hundreds of times per hour rather than a few times per hour without worry for constant retrieval. For Midfielders and Fullbacks they would practice from 30-40 yards out and only have to run in 10-20 yards to retrieve the bounding ball. While with prior art systems, few if any range shots will be practiced except during actual game situations or live active team practice, but with the present invention they'll get plenty of practice and become better players.  

[0040] Any community, middle school, high school or college sports field in the US or internationally would greatly benefit to have this system in place. Any organization or even parent who cares to have players compete at the highest level would greatly benefit from this invention.  

[0041] The primary purpose of the present invention is to provide players the ability to train constantly on honing skill at shooting, ball handling, and scoring prowess more efficiently without fear of missing and therefore having to constantly retrieve the ball.  

[0042] The present invention would make average players great scorers and great scorers excellent. A player could get hundreds of shots off per hour rather than a few dozen and the ball would generally be bounding back so natural game like action is required to handle the ball before the next shot is taken. Then the player keeps repeating, getting tired and fit and practice at a rate that this hundreds of times better than what is available today.  

[0043] By angling the rebound nets the ball rebounds back toward the center shooting area to a desired degree depending on the angle.
The sports rebound net of the present invention may be permanently installed in cement footings for a strong permanent structure requiring only periodic replacement of the nets.

A final advantage of the present invention is that it will allow constant practice of "one-timers," the most difficult skill to master in the sports.

**BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**

These and other details of my invention will be described in connection with the accompanying drawings, which are furnished only by way of illustration and not in limitation of the invention, and in which drawings:

**FIG. 1** is a front elevational view of a basic full size adjustable soccer rebound practice net of the present invention;

**FIG. 2** is a front elevational view of a full size adjustable soccer rebound practice net of the present invention having a series of web panels each attached to a surrounding frame of paired vertical and horizontal posts showing optional attachment to vertical external structures or secured by a concrete base anchoring at least the vertical end posts;

**FIG. 3** is a side elevational view of the full size adjustable soccer rebound practice net of FIG. 1 showing various placements of the vertical target posts;

**FIG. 4** is a side elevational view of the full size adjustable soccer rebound practice net of FIG. 2 showing various placements of the vertical target posts;

**FIG. 5** is a front elevational view of a full size adjustable lacrosse rebound practice net of the present invention having a series of web panels each attached to a surrounding frame of paired vertical and horizontal posts which may have angled poles or angled poles, as in FIGS. 3 and 4.

**DETAILED DESCRIPTION OF THE INVENTION**

In FIGS. 1-5, an adjustable sports rebound practice net apparatus 10 and 10A comprises a net structure 20 and 20A having a pair of vertical end posts 21E rigidly secured in a vertical orientation either implanted in the ground preferably with a cement base 40 or alternately each secured to an external object by flexible straps 30, as shown in FIG. 2. The pair of end posts 21E are spaced apart and they may be by a variety of distances depending upon the surrounding area in which they are placed to create a clear open span between the pair of end posts.

The apparatus further comprises at least one pair of vertical target posts 21T secured in a vertical orientation between the pair of end posts 21 E to define a target area therebetween for a player to hit with a soccer ball. The target posts 21T may be either implanted in the ground or each secured to an external object and are positioned adjustable in a range of positions from a first position aligned with the pair of end posts to any of a variety of positions behind a plane defined by the area between the two end posts 21E as shown by the dashed line versions of the target posts 21T in FIGS. 3 and 4. The target posts 21T are spaced apart to create a clear open span target area therebetween. The target area defining any of a range of sizes of target areas from a full soccer goal size opening to any other smaller defined target area for a player to hit with the soccer ball. A similar adjustable post configuration applies to the lacrosse practice rebound net structure 20A of FIG. 5. It is understood that it may take multiple posts to create a full size soccer goal target area but only two posts to create a full size lacrosse goal target area.

The apparatus further comprises at least one net 23T and 23R drawn between the pair of end posts 21E and at least one outer pair of target posts 21T. The net is stretched tightly for receiving and rebounding a soccer ball from the net. The pair of outer target posts 21T is positioned to stretch the target net 23T tightly between the target posts to rebound the soccer ball striking the target area and to stretch the rebound net 23R tightly between the outer pair of target posts 21T and the pair of end posts 21E defining a rebound area therebetween to rebound a soccer ball contacting any portion of the rebound area.

Elasticized members are associated with the net for rebounding the soccer ball. In FIGS. 2 and 5, the elasticized members may comprise a plurality of elasticized connections 26, such as sections of bungee type cords between the vertical posts 21E and 21T and the net 23T and 23R. Alternately, the elasticized members may comprise at least one portion of the net 23T and 23R, such as in FIG. 1.

The apparatus preferably further comprising at least one upper horizontal target post 22T attached between the vertical target posts 21T to define an upper edge of the target area. In the preferred full size embodiment of FIGS. 1 and 2, the target posts 21T protrude upwardly eight feet above a playing surface on which they are located and two outside target posts are spaced apart a distance of twenty-four feet and the upper horizontal target post 22T extends between the two outside target posts 21T to create a simulated frame of a standard soccer net.

The apparatus preferably further comprises at least one lower horizontal target post 22L attached between the two outside target posts 21T to define a lower edge of the target area, which may be an extension of the lower horizontal post extending between the outer end posts 21E, to stretch a target portion of the net 23T between the upper horizontal target post 22T and the lower horizontal target post 22L.

An upper horizontal frame post 22U is attached between the pair of end posts 21E to define an upper edge of the rebound area having the rebound net 23R and to stretch the net between the upper horizontal frame post 22U and the lower horizontal frame post 22L.

In FIG. 2, the apparatus comprises a series of spaced vertical posts 21E and 21T and a series of spaced horizontal posts 22U, 22M, 22T, and 22L attached to the series of vertical posts to form a grid pattern and the net comprises a plurality of modular nets 21T and 21R each attached within one grid of the grid pattern attached to the surrounding vertical posts and horizontal posts.

In FIG. 2 the target area comprises three square modular target nets 23T across and one square modular target net high and the total combined target area and rebound area comprises two square modular nets high, including one target net 23T and one rebound net 23R over the rebound area and two rebound nets 23R on the sides of the target area, and at least five square modular nets wide, including three target nets 23T and a rebound net 23R on each side of the target area, for a soccer rebound practice net. All soccer rebound practice nets should have approximately the same proportions, such as for children’s nets which usually have smaller actual nets, so that the child’s soccer rebound practice net 20 would have a smaller target area and proportionally smaller rebound areas.

In FIG. 2, three target posts 21T protrude upwardly eight feet above a playing surface on which they are located
and the two outside target posts are spaced apart a distance of twenty-four feet and the at least one upper horizontal target post \(22T\) extends between the two outside target posts to create a simulated frame of a standard size soccer net.

[0062] In FIG. 5, the target area comprises one square modular net \(23T\) across and one square modular net high and the total combined target area and rebound area comprises two square modular nets high, including one modular target net \(23T\) and one modular rebound net \(23R\) above the target net and two modular rebound nets \(23R\) on the sides of the target area, and at least three square modular nets wide, including the center modular target net \(23T\) and the two side modular rebound nets \(23R\), for a lacrosse rebound practice net. All lacrosse rebound practice nets should have approximately the same proportions, such as for children’s nets which usually have smaller actual nets, so that the child’s lacrosse rebound practice net \(20A\) would have a smaller target area and proportionally smaller rebound areas.

[0063] In FIG. 5, the two target posts \(21T\) protrude upward six feet above a playing surface on which they are located and are spaced apart a distance of six feet and the at least one upper horizontal target post \(22T\) extends between the two target posts \(21T\) to create a simulated frame of a standard lacrosse net.

[0064] In FIG. 2, a plurality of flexible elongated members \(30\), such as adjustable straps, are provided spaced along the height of each of the pair of end posts \(21E\) for connecting each of the pair of end posts \(21E\) to an adjacent rigid vertical element to support the pair of end posts, such as a tree \(60A\) or a post or other vertical structure \(60B\).

[0065] The target area is visually distinguishable over the surrounding rebound area. In every case the present invention identifies the shooting target area with different color nets \(23T\) from the surrounding rebound nets \(23R\) or some other way including different color target net area posts \(21T\) and \(22T\). For example, a white net (or team color net) may be used as the target area net and all black nets around the target in the rebound area.

[0066] One or more banners \(25A\) and \(25B\) may be attached to a portion of the net \(23R\) bearing indicia on the banner, such as a team banner \(25A\) or an advertising banner \(25B\) bearing a logo.

[0067] At least one vertical elongated structure may extend above any of the vertical posts including the pair of end posts \(21E\) and the intermediate vertical target posts \(21T\) to fly a flag \(24\) therewith.

[0068] In use, there are two primary ways to install the system. The first is from scratch by installing 3 inch diameter fence-like aluminum end posts \(21E\) sixteen feet out of the ground each set 4 to 4 feet deep in a cement base \(40\) into the area chosen 44 feet apart. Another smaller diameter supporting post would likely be set in the center and a top and bottom horizontal posts \(22U\) and \(22L\) would be set. Readily available 16 to 20 pound pressure sections of nets \(21T\) and \(21R\) sections with rope borders are custom sized to fit the segmented sections and tied with bungee cord material \(26\) all the way around to cause the “rebound effect”. The netting should be durable. The nets and/or the bungee ties could be replaced and/or adjusted every few years.

[0069] The dimensions can vary and technically could extend to much larger areas with less true rebound results to simply harness wild kicks or side out kicks for the purpose of containment.

[0070] The posts are preferably black PVC coated hardened steel fence posts with black netting and black bungee cords for the rebound area and the target area (preferably a full goal size made up of three \(8'\times8'\) squares) is made with white netting.

[0071] With four inch end posts and three inch mid posts, an ideal layout for optimal practice use and best structural integrity, provides posts extending sixteen feet above the ground (or higher for using the posts to display flags above the netting) with netting sections of eight feet high and eight feet wide in three bottom middle sections representing the soccer net area, which is twenty-four feet wide and eight feet high, and three eight by eight feet rebound net areas above the net area. The side rebound net areas comprise two stacked eight feet high by ten feet wide net areas on each side of the center soccer net target area, thereby allowing ample rebound net area for returning shots that land to the side of or above the target net area. The overall framed in net area is forty-four feet wide and sixteen feet high. The posts and cross bars forming the perimeter of the net areas are preferably PVC coated galvanized steel pipes.

[0072] The preferred proportions of the present invention for a full size soccer goal target area should have the outer end support posts and upper horizontal post spaced twice as tall as the target area and almost twice as wide as the target area \(10'\) to the left and \(10'\) to the right—each \(15'\) tall.

[0073] Variations in sizes of smaller approved kids soccer goals should have similar proportions of the outer posts to the inner target area having approximately \(2x\) the height and \(2x\) the width of the target area.

Soccer Goal Dimensions by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Goal Size MIN TO MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-6:U-7</td>
<td>((4.5'\times9'\ W))  ((6.5'\times12'\ W))</td>
</tr>
<tr>
<td>U-8</td>
<td>((4.5'\times9'\ W))  ((6.5'\times12'\ W))</td>
</tr>
<tr>
<td>U-9</td>
<td>((6.5'\times12'\ W))  ((6.5'\times18.5'\ W))</td>
</tr>
<tr>
<td>U-10</td>
<td>((6.5'\times18.5'\ W))  ((7'\times21'))</td>
</tr>
<tr>
<td>U-11</td>
<td>((6.5'\times18.5'\ W))  ((8'\times24'\ W))</td>
</tr>
<tr>
<td>U-12</td>
<td>((7'\times21'))  ((8'\times24'\ W))</td>
</tr>
<tr>
<td>U-13</td>
<td>((8'\times24'\ W))  ((8'\times24'\ W))</td>
</tr>
<tr>
<td>INT'L</td>
<td>((8'\times24'\ W))  ((8'\times24'\ W))</td>
</tr>
</tbody>
</table>

[0075] If the target area is one section (as in the lacrosse unit) it needs to be square and flat towards the center shooting area. However, if the target area has more than one section (as in the full size soccer unit which has three \(8'\times8'\) sections) even the target area may be slightly angled. The center target area should be square/flat and then any end support posts to the left and right could be angled forward slightly to make the rebounds go out more toward a shooter with angles increasing to the outside end support posts. The end support posts can be set up at varying post position angles from center to practice for one player or several players. Forwards could have rebounds deflected in a closer vicinity and midfielders could have rebounds directed out further towards the area midfielders would shoot from by varying the angles of the permanently installed posts. A Division I or professional soccer team would likely install several different variations of the unit with different aiming configurations. Seldom would
angling of the posts be too extreme and it could even be set up completely flat across which may be better for multiple person play.

[0076] The ideal size for the end support posts and the upper horizontal post is 2x the height of the target area and 1.5x to 2x the width of the target area for soccer.

[0077] The ideal size for the end support posts and the upper horizontal post is 2x the height of the target area and 3x the width of the target area for lacrosse, preferably set up with three 6 feet by 6 feet nets across and two 6 feet by 6 feet nets high.

[0078] The lacrosse net is smaller and could be set up both with permanent post installation and some temporary/mobile set ups with footing to secure the unit for rebounding.

[0079] Younger kids playing soccer have smaller goals so the sports rebound nets of the present invention may be customized to be perfect for their target areas. The goal shooting target area and about double height rebound area above and extra miss rebound area on the left and right, all based on a smaller target.

[0080] For younger children practicing lacrosse, a smaller target area with left/right and double high rebound areas may be used for shooting practice.

[0081] While it is possible to attach the posts to external objects, the preferred embodiment is a new installation of posts cemented permanently into the ground.

[0082] Flag poles or extended posts hold a series of flags 24 along the top of the net for team logos or advertisements or national or local political flags. Banners may be attached to different parts of the net with logos or advertising. The bottoms of the poles may be sunk in cement in the ground or inserted into the ground.

[0083] The present invention provides a system of soccer (and potentially other sporting venues) rebounding nets on a large scale to improve shooting and scoring and ball handling skills. Because the ball bounds back to the practicing player(s) the player has live bounding balls to control and position for repeat shooting or consistent one-time shooting drills without having to retrieve a ball constantly. Because the minimum recommended size of the soccer full size goal system of the present invention is a permanently installed rebound net 44 feet wide by 16 feet tall with a center target area 24 feet wide by 8 feet tall simulating an actual soccer net, a player can shoot towards the ‘hot scoring zones’ without worrying about constantly retrieving balls.

[0084] It is understood that the preceding description is given merely by way of illustration and not in limitation of the invention and that various modifications may be made thereto without departing from the spirit of the invention as claimed.

What is claimed is:

1. An adjustable sports rebound practice net apparatus comprising:
(a) a pair of vertical end posts rigidly secured in a vertical orientation either implanted in the ground or alternately each secured to an external object, the pair of end posts spaced apart adjusitbly by any of a variety of distances depending upon the surrounding area in which they are placed to create a clear open span between the pair of end posts;
(b) at least one pair of vertical target posts secured in a vertical orientation between and spaced apart from the pair of end posts to define a ball rebound target area within the target posts for a player to hit with a sports ball and to define a missed target ball rebound area between the target posts and the end posts, the at least one pair of target posts either implanted in the ground or each secured to an external object, the at least one pair of target posts positioned adjusitbly in a range of positions from a first position aligned with the pair of end posts to any of a variety of positions behind a plane defined by the area between the two end posts, the at least one pair of target posts spaced apart to create a clear open span target area between the at least one pair of target posts, the target area defining any of a range of sizes of target area from a full sports goal size opening to any other smaller defined target area for a player to hit with the sports ball;
(c) at least one net stretched between the pair of end posts and contacting the at least one pair of target posts, the at least one net stretched tightly for receiving and rebounding a sports ball from the at least one net, so that the at least one pair of target posts is positioned to stretch the at least one net tightly between the at least one pair of target posts to rebound the sports ball striking the target area and to stretch the at least one net tightly between the at least one pair of target posts and the pair of end posts defining a rebound area to rebound a sports ball contacting any portion of the rebound area;
(d) the apparatus of claim 1 wherein the elasticized members comprise a plurality of elasticized connections between the vertical posts and the at least one net.

2. The apparatus of claim 1 wherein the elasticized members comprise a plurality of elasticized connections between the vertical posts and the at least one net.

3. The apparatus of claim 1 further comprising at least one upper horizontal target post attached between the at least one pair of vertical target posts to define an upper edge of the target area.

4. The apparatus of claim 3 wherein the at least two target posts protrude upwardly eight feet above a playing surface on which they are located and two outside target posts of the at least two target posts are spaced apart a distance of twenty-four feet and the at least one upper horizontal target post extends between the two outside target posts to create a simulated frame of a standard soccer net.

5. The apparatus of claim 3 wherein the at least two target posts protrude upwardly six feet above a playing surface on which they are located and two outside target posts of the at least two target posts are spaced apart a distance of six feet and the at least one upper horizontal target post extends between the two outside target posts to create a simulated frame of a standard lacrosse net.

6. The apparatus of claim 3 further comprising at least one lower horizontal target post attached between the two outside target posts to define a lower edge of the target area and to stretch a target portion of the at least one net between the at least one upper horizontal target post and the at least one lower horizontal target post.

7. The apparatus of claim 1 further comprising at least one upper horizontal frame post attached between the pair of end posts to define an upper edge of the rebound area.

8. The apparatus of claim 7 further comprising at least one lower horizontal frame post attached between the pair of end posts to define a lower edge of the rebound area and to tighten and stretch the at least one net between the upper horizontal frame post and the lower horizontal frame post.

9. The apparatus of claim 8 wherein the elasticized members comprise a plurality of elasticized connections between the horizontal posts and the at least one net.
10. The apparatus of claim 1 wherein the elasticized members comprise at least one portion of the at least one net.

11. The apparatus of claim 1 comprising a series of spaced vertical posts and a series of spaced horizontal posts attached to the series of vertical posts to form a grid pattern and wherein the at least one net comprises a plurality of modular nets each attached within one grid of the grid pattern attached to the surrounding vertical posts and horizontal posts.

12. The apparatus of claim 11 wherein the target area comprises three square modular nets across and one square modular net high and the total target area and rebound area comprises two square modular nets high and at least five square modular nets wide for a soccer rebound practice net.

13. The apparatus of claim 11 wherein the target area comprises one square modular net across and one square modular net high and the total target area and rebound area comprises two square modular nets high and at least three square modular nets wide for a lacrosse rebound practice net.

14. The apparatus of claim 1 wherein the target area is visually distinguishable over the surrounding rebound area.

15. The apparatus of claim 1 further comprising a concrete base underground surrounding underground portions of at least the pair of end posts for rigid support of the pair of end posts.

16. The apparatus of claim 1 further comprising a plurality of flexible elongated members spaced along the height of each of the pair of end posts for connecting each of the pair of end posts to an adjacent rigid vertical element to support the pair of end posts.

17. The apparatus of claim 1 further comprising at least one banner attached to a portion of the at least one net bearing indicia on the banner.

18. The apparatus of claim 1 further comprising at least one vertical elongated structure extending above at least one of the posts of the pair of end posts and the intermediate vertical support posts to fly a flag therefrom.