

**CLASS 482, EXERCISE DEVICES****SECTION I - CLASS DEFINITION**

This class provides for apparatus intended to be operated by a human user for the purpose of: (a) facilitating the conditioning or developing of a muscle of the user by repetitive or continuous activity of the user or, (b) participating in a track, field, gymnastic, or athletic activity, unless by analogy of structure or by other function the apparatus is classified elsewhere.

- (1) Note. In some of the definitions of subclasses hereunder, the phrase "significance is attributed" is used to describe a function that is the primary use of the structure of patents therein. The structure of the apparatus may be capable of use for other purposes, but the claimed disclosure of the patent so placed indicates the intended primary function of the structure as that described by the title and definition of the subclass.
- (2) Note. Conditioning or developing a muscle includes helping a user, e.g., an infant or invalid, to walk or learn how to walk unless provided for elsewhere. See Subclass References to the Current Class, below.

**SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS**

Apparatus claimed for measuring the amount of force exerted while exercising with a Class 482 type exercise apparatus is proper for Class 482. Apparatus intended for use only in measuring the strength of an individual for a testing purpose or for measuring the strength of an individual while exercising but not claiming any positive exerciser structure is found elsewhere. See References to Other Classes, below. A reference claiming a diagnostic or other exercise measurement type feature, e.g., pulse monitoring, repetition counting, respiratory function, etc., in addition to strength testing or claiming a feature related to monitoring stamina would generally be classified in this class (482) unless a placement controlling claim directed solely to use as a diagnostic device is present thus making it proper for classification elsewhere. See References to Other Classes, below.

Patents placed into this class in accordance with part (a) of this class definition clearly show that the disclosed purpose is to condition or develop the user's own body

through active user involvement, i.e., not caused by external stimulation. Apparatus operated by a person or machine to move the body of the user, i.e., passive user involvement, for a similar purpose are classified as originals elsewhere. See References to Other Classes, below.

**SECTION III - SUBCLASS REFERENCES TO THE CURRENT CLASS**

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 51, see the Search Class notes, for apparatus intended to help a user to walk or learn how to walk.

**SECTION IV - REFERENCES TO OTHER CLASSES**

SEE OR SEARCH CLASS:

- 73, Measuring and Testing, particularly subclasses 379.01+ for a device for measuring and testing of muscular strength. See Lines With Other Classes and Within This Class, above.
- 84, Music, subclasses 465+ for an exercise device for a musician.
- 104, Railways, particularly subclass 62 for a railway vehicle traveling along a fixed track and used for physical training.
- 116, Signals and Indicators, for a mechanical signal or indicator, per se.
- 119, Animal Husbandry, particularly subclasses 29+ for an exercise device for an animal.
- 135, Tent, Canopy, Umbrella, or Cane, particularly subclasses 65+ for a cane, stick, crutch, swagger stick, walker, etc. used to aid human locomotion. Also see Subclass References to the Current Class, above.
- 280, Land Vehicles, for a wheeled walker, skates, skis, bicycle, or other land vehicle having user propelling structure. Also see Subclass References to the Current Class, above.
- 297, Chairs and Seats, particularly subclasses 5+ for a walker provided with a seat whereby the user may either stand or sit.
- 340, Communications: Electrical, particularly subclasses 573.1+ for an electrical alarm or indicator responsive to a condition of a human body or animal.
- 434, Education and Demonstration, particularly subclasses 258+ for a device used for developing or testing coordination.

- 441, Buoys, Rafts, and Aquatic Devices, particularly subclasses 55+ for a swimming aid to increase stroke efficiency and subclasses 65+ for a water skimming or walking device.
- 472, Amusement Devices, for an amusement device in general and particularly subclasses 1+ for an amusement roundabout, subclasses 85+ for a race track or accessory therefor, subclasses 92+ for a surface or enclosure for an athletic or exhibition event and subclass 136 for an amusement building or part thereof.
- 473, Games Using Tangible Projectile, for a device related to a contest of skill and where the result can be determined based upon a rule, and subclasses 441+, in particular, for a tackling or blocking dummy used in football practice
- 600, Surgery, subclasses 300+ for apparatus used for the medical evaluation of the condition of a living body by a diagnostician. (See Lines With Other Classes and Within This Class, above).
- 601, Surgery: Kinesitherapy, subclasses 23+ for a passively used exercise device (See Lines With Other Classes and Within This Class, above).
- 700, Data Processing: Generic Control Systems or Specific Applications, particularly subclasses 91 through 93 for a computer or data processing system related to an athletic contest.

### SUBCLASSES

- 1 HAVING SPECIFIC ELECTRICAL FEATURE:**  
This subclass is indented under the class definition. Subject matter wherein the apparatus includes a particular electrical component or arrangement, e.g., operating, controlling, monitoring, or indication circuitry, etc.
- (1) Note. To be proper for placement in this subclass as an original classification, the exercise equipment must have a significantly claimed electrical feature. A mere recitation of a named electrical feature such as “motorized”, “electric”, “electrically powered”, “electrically monitored”, “electrical indicator”, or “lighted”, would be excluded from this subclass if no further details are claimed. A cross reference copy based upon a more complete disclosure could, of course, be provided.

- (2) Note. The electrical feature may include a computer or computer related circuitry, display, feedback, or software.

### 2

#### **Electrical energy generator:**

This subclass is indented under subclass 1. Subject matter wherein the apparatus transforms input energy of the user into electrical power.

- (1) Note. The electrical energy generated may be either alternating or direct current, i.e., A.C. or D.C. The ultimate use of the electrical energy generated need not be claimed.

### 3

#### **Pace setting indicator:**

This subclass is indented under subclass 1. Subject matter wherein the electrical component or arrangement supplies a periodic signal for informing the user of a desirable rate of activity.

- (1) Note. A pace setting indicator is often called a “pace setter” although no structure for actually controlling the rate of activity of the user or the equipment is provided.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 6, and 7, for circuitry which regulates the rate of movement of the apparatus.

### 4

#### **Equipment control:**

This subclass is indented under subclass 1. Subject matter wherein the electrical component or arrangement regulates some parameter of the apparatus.

### 5

#### **Amount of resistance:**

This subclass is indented under subclass 4. Subject matter wherein the electrical component or arrangement quantitatively regulates a force applied in opposition to the user.

- (1) Note. The amount of resistance may be controlled directly by the user or via a feedback system.

**6 Regulates rate of movement:**

This subclass is indented under subclass 5. Subject matter wherein the force applied in opposition to the user by the apparatus is used to govern the speed, or change in speed, i.e., acceleration, of the apparatus.

- (1) Note. The rate of movement of the exercise equipment may be controlled directly by the user or via a feedback system by varying the amount of resistance. This subclass also includes exercise equipment wherein any of a range of operating rates may be selected by a user manipulating an electrical control which then varies the amount of resistance.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 7, for electrical equipment controlling the rate of movement of the apparatus in a manner other than by varying the amount of resistance.

**7 Rate of movement:**

This subclass is indented under subclass 4. Subject matter wherein the electrical component or arrangement regulates the speed, or change in speed, i.e., acceleration, of the apparatus.

- (1) Note. The rate of movement of the exercise equipment may be controlled directly by the user or via a feedback system. This subclass also includes exercise equipment wherein any of a range of operating rates may be selected by a user manipulating an electrical control.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 6, for electrical equipment regulating the rate of movement of the apparatus by varying the amount of resistance opposing the user.

**8 Monitors exercise parameter:**

This subclass is indented under subclass 1. Subject matter wherein a conditioning, developing, track, field, gymnastic, or athletic feature is measured or indicated by the electrical

component or arrangement when the apparatus is operated by the user.

- (1) Note. The exercise parameter being monitored may include features such as the amount of work being done, force being exerted, repetitions completed, distance traveled, etc.

SEE OR SEARCH CLASS:

- 73, Measuring and Testing, particularly subclasses 379.01+ for devices for measuring and testing of muscular strength. See Class Definition, (2) Note.
- 340, Communications: Electrical, particularly subclasses 500+ for an electrical condition responsive indicator and subclasses 815.4+ for an electrical visual indicator, per se.
- 600, Surgery, subclasses 481+ for apparatus used for the medical evaluation of the cardiovascular condition of a living body by a diagnostician.
- 700, Data Processing: Generic Control Systems or Specific Applications, subclasses 91 through 93 for computer analysis, management, monitoring, or scoring of a contest or contestant not otherwise provided for.

**9 To create or modify exercise regimen:**

This subclass is indented under subclass 8. Subject matter wherein the measurement or indication is used by the electrical component or arrangement to establish or change a system of (1) conditioning or developing of the muscle of the user or (2) participation in the track, field, gymnastic, or athletic activity.

**10 FOR HEAD OR NECK:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to conditioning or developing a muscle found in the region above a shoulder of the user, i.e., a head or neck muscle.

**11 Face (e.g., jaw, lip, etc.):**

This subclass is indented under subclass 10. Subject matter wherein significance is attributed to conditioning or developing a muscle found on a front part of the head of the user between the top of the forehead and the bottom of the chin, i.e., a face muscle.

**12 FOR THRUSTING A POINTED WEAPON (E.G., A FENCING FOIL, ETC.) OR SIMULATION THEREOF:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to conditioning or developing a muscle employed while manipulating an instrument with a tapered end or an imitation thereof, which is shoved, tapered end foremost, towards an opponent.

- (1) Note. This subclass provides for an exercise device involving thrusting apparatus such as a fencing foil, bayonet, spear, or similar piercing weapon or a simulation of such a weapon.

**SEE OR SEARCH CLASS:**

- 30, Cutlery, for a cutting implement such as a knife, foil, sword, or spear, per se.  
42, Firearms, particularly subclass 86 for a firearm combined with a bayonet.  
463, Amusement Devices: Games, particularly subclass 47.1 for fencing game apparatus and subclasses 47.2+ for a striking type of weapon for use on a human being (e.g., a police club, billy, etc.), which weapon being often used in a thrusting manner.

**13 FOR IMPROVING RESPIRATORY FUNCTION:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to conditioning or developing a muscle required for breathing or using the lungs.

**SEE OR SEARCH CLASS:**

- 600, Surgery, subclasses 538+ for a respiratory exercise device which includes a quantitative indicator of breath flow or lung capacity disclosed as a diagnostic device used for medical evaluation of a living body by a diagnostician.

**14 FOR TRACK OR FIELD SPORT:**

This subclass is indented under the class definition. Subject matter wherein the apparatus is related to an athletic activity involving a measured running, jumping, or throwing event, i.e., a track or field sport.

- (1) Note. The athletic activities known as field sports were originally performed in an open field, although some of such activities are now performed in a closed arena. Wherever performed, however, they include such measured activities as running over a distance, jumping over one or more barriers or over a distance, or throwing any of various pieces of named equipment. The structural differences between the equipment found in each of the named subclasses are not necessarily large differences, and equipment intended for a particular activity could be used for a different purpose; but the differences are significant when considered in light of the special requirements peculiar to each of the named activities for which the equipment is intended to be used.

**SEE OR SEARCH THIS CLASS, SUBCLASS:**

- 74, for a device related to jogging in general, i.e., not related to running over a measured distance in a track or field sport.

**SEE OR SEARCH CLASS:**

- 273, Amusement Devices: Games, particularly subclasses 441+ for a game apparatus dealing with physical ability.  
472, Amusement Devices, for an amusement device in general and particularly subclasses 85+ for a race track or accessory therefor, subclasses 92+ for a surface or enclosure for an athletic or exhibition event and subclass 136 for an amusement building or part thereof.

**15 Jumping, vaulting, or hurdling:**

This subclass is indented under subclass 14. Subject matter wherein the apparatus is related to an event in which the user springs or leaps clear of the ground or other support by a sudden muscular effort.

- (1) Note. Included under this subclass is structure related to a landing pit or pad used when jumping, vaulting or hurdling.

- 16 Crossbar or support therefor:**  
This subclass is indented under subclass 15. Subject matter wherein the apparatus includes (1) an elongated horizontal member over which the user leaps or (2) structure for holding the member above the ground or a floor.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
25, for a vaulting horse over which a user may acrobatically jump.
- 17 Including height adjustment feature:**  
This subclass is indented under subclass 16. Subject matter wherein the apparatus is provided with structure whereby the vertical distance between the ground or floor and the horizontal member may be varied.
- 18 Vaulting pole or stop:**  
This subclass is indented under subclass 15. Subject matter wherein the apparatus includes (1) an elongated slender rod intended to help a user thereof leap into the air or (2) a member, stationary with respect to the ground, intended to receive one end of the rod as the user is thereby helped to leap.
- (1) Note. The user is usually vaulting over a horizontal bar.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
33, for a structurally similar flexible pole secured to the ground and used for gymnastic exercise.
- 19 Starting block for runner:**  
This subclass is indented under subclass 14. Subject matter wherein the apparatus includes a member securable to the surface of an athletic track for use as an abutment to facilitate a fast start from a starting line by the user in a foot race.
- (1) Note. The starting block may permit quick disconnection and removal thereof from the track by a person other than the runner using it, thus helping to avoid any obstruction to the runner in a multilap event.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
74, for a jogging accessory used when not running over a measured distance in a track or field sport.
- 20 Throwing:**  
This subclass is indented under subclass 14. Subject matter wherein the apparatus is related to an event in which an object is flung or hurled by the user.
- (1) Note. Included in this subclass is an elongated, spearlike object, e.g., a javelin, an elongated rope or chain having at one end thereof a relatively heavy object, e.g., a hammer, etc., and a ground or floor supported member used to limit foot placement when throwing the object, e.g., a toe board, etc.
- 21 Discus:**  
This subclass is indented under subclass 20. Subject matter wherein the flung or hurled object is a circular plate having a diameter that is relatively large compared to its thickness, i.e., a discus.
- 22 Shot-put:**  
This subclass is indented under subclass 20. Subject matter wherein the flung or hurled object is a heavy spheroid, i.e., a shot.
- SEE OR SEARCH CLASS:  
473, Games Using Tangible Projectile, for a ball used in a game or sport, particularly subclasses 52+ for a ball used in the game of billiards or pool, subclasses 125+ for a ball used in the game of bowling, subclasses 280+ for a projectile used to practice for the game of golf, subclasses 351+ for a golf ball, subclasses 422+ for a projectile used to practice or train for a playing field or court game, and subclasses 569+ for a game projectile (often a ball), in general.
- 23 GYMNASTIC:**  
This subclass is indented under the class definition. Subject matter wherein significance is attributed to the use of the apparatus for an acrobatic purpose by the user.

- (1) Note. The terms “gymnastic” and “acrobatic” have come to denote and describe various pieces of equipment such as a trapeze, bar, vaulting horse, diving board, trampoline, etc., that are used in physical activities known by similar names. These activities are characterized by extreme movements of the user, who uses the equipment as a fulcrum or starting area to launch bodily through space, swing therefrom, or perform other such physical activity thereon. The significance of the apparatus is more in the activity for which the apparatus is used than in the structural differences between the apparatus (see the Class Definition, (1) Note).

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 109, for a club type exercise device which may be used for juggling.

SEE OR SEARCH CLASS:

- 273, Amusement Devices: Games, particularly subclasses 441+ for a game apparatus dealing with physical ability.

**24 Trapeze or rings:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is either (1) a short, horizontal, swingable bar suspended at each end by a flaccid strand, e.g., a rope, etc., or (2) a pair of annular objects each suspended by a flaccid strand, e.g., a rope, etc., about which the user may move in an acrobatic manner.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 143+, for a suspension device from which the user may freely hang.

SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclasses 118+ for an amusement swing.

**25 Vaulting or pommel horse:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is (1) a supported body used for jumping over

or for another acrobatic purpose, i.e., a vaulting horse or (2) a supported body with a pair of handles mounted thereon for an acrobatic purpose, i.e., a pommel horse.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 16+, for a track or field sport in which a user jumps, vaults, or hurdles over a crossbar.

- 34, for a bar or rope for balancing upon.

- 38+, for a horizontal bar used for a gymnasts purpose.

**26 Projector:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is used to thrust the user toward other acrobatic apparatus or into the air to help enhance movement by the user, e.g., in somersaulting, flipping, diving, bouncing, etc.

SEE OR SEARCH CLASS:

- 182, Fire Escape, Ladder, or Scaffold, subclasses 137+ for a fire escape type body catcher having similar structure.

**27 Trampoline:**

This subclass is indented under subclass 26. Subject matter wherein the acrobatic apparatus employs a strong, taut, flexible sheet of resiliently supported material to thrust the user into the air usually in a bouncing manner.

- (1) Note. Jogging trampolines are included under this subclass.

SEE OR SEARCH CLASS:

- 114, Ships, subclass 61.23 for a multiple hull ship with a trampoline-type deck.

**28 Having foldable frame:**

This subclass is indented under subclass 27. Subject matter wherein the flexible sheet of material is resiliently supported on a framework which can be bent over for more compact storage of the apparatus or for use of the apparatus in a different manner.

**29 With disparate structure:**

This subclass is indented under subclass 27. Subject matter wherein an element, not directly related to the resiliently supported flexible sheet type apparatus or its support structure, is

additionally provided for use therewith or as an enhancement thereof.

**30 Spring board:**

This subclass is indented under subclass 26. Subject matter wherein the thrusting acrobatic apparatus is a thin, elongated, planar member secured near one end and cantilevered outwardly therefrom for propelling the user by employing either the resilient material of the planar member itself or a separate resilient element associated therewith.

**31 Spring external to board:**

This subclass is indented under subclass 30. Subject matter wherein the thin planar member is provided with a separate resilient element to produce its thrust.

**32 Movable fulcrum:**

This subclass is indented under subclass 30. Subject matter wherein the thin planar member pivots or bends about a support which is repositionable at plural locations between the secured end of the thin planar member and its cantilevered end to vary the amount of cantilever.

**33 Tower or pole for swinging upon:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is an upright, elongated, slender framework or rod with its bottom end held in place while its opposite end serves as a support for the user and is capable of oscillating back and forth as desired by the user.

- (1) Note. A tower or pole used for swinging upon with its bottom end held in place by another person is proper for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 18, for a structurally similar flexible pole used to help launch a pole vaulter over a high bar.

**34 Bar or rope for balancing upon:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is an elongated, solid or flaccid, underlying member on which the user attempts to support

and maintain the center of gravity of his/her body in a state of equilibrium.

**35 Play area climbing or traversing arrangement (i.e., for use by children):**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is a structure mounted on a playground or floor for ascending, descending, or moving laterally upon by a juvenile user for his/her enjoyment.

- (1) Note. The combination of a play area climbing or traversing arrangement with a seesaw, slide, or swing is proper for this subclass where significance is attributed to the climbing or traversing structure. A mere ladder, set of steps, etc. used to climb onto a slide is not considered significant under this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 37, for acrobatic apparatus which a user of any age may ascend or descend upon primarily by using an arm or hand.

SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclasses 106+ for a seesaw, subclasses 116+ for a slide, or subclasses 118+ for a swing, used for an amusement purpose.

**36 Having upright array of horizontally extending elements:**

This subclass is indented under subclass 35. Subject matter wherein the structure for ascending, descending, or moving laterally upon includes a relatively vertical group of runglike components supported in a position perpendicular to vertical, i.e., horizontal.

SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclasses 116+ for a slide having a mere ladder, set of steps, etc. used to climb upon the slide.

**37 Arm or hand type climbing arrangement:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is structure which the user may ascend or descend upon primarily by using an upper limb

or terminal gripping portion of the user, i.e., an arm or hand.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 35+, for a play area climbing or traversing arrangement for a juvenile user.
- 38, for a horizontal bar used for an acrobatic purpose other than climbing.
- 52+, for stair climbing type exercise equipment.
- 143+, for a support of a nonacrobatic nature for suspending the user.

**38 Horizontal bar:**

This subclass is indented under subclass 23. Subject matter wherein the acrobatic apparatus is a rod supported in a position perpendicular to vertical, i.e., horizontal.

- (1) Note. A horizontal chinning bar is proper for this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 15+, for a jumping, vaulting or hurdling track or field device often including a horizontal member.
- 34, for a bar or rope for balancing upon.
- 35+, for a play area climbing or traversing arrangement often including a horizontal bar.
- 37, for an arm or hand type climbing arrangement often including a horizontal bar.

**39 Attached to vertical wall or associated structure:**

This subclass is indented under subclass 38. Subject matter wherein the horizontal rod is supported by a portion of an upright planar construction, e.g., a room partition, side surface, etc., or related construction thereto, e.g., a door, window, jamb, etc.

**40 Door or door jamb:**

This subclass is indented under subclass 39. Subject matter wherein the horizontal rod is supported by a movable closure mounted in a walk through passageway in the upright planar construction or by framing structure for surrounding a walk through passageway.

**41 Parallel bars:**

This subclass is indented under subclass 38. Subject matter wherein the acrobatic apparatus includes a plurality of horizontal stationary rods spaced an equal distance apart from each other at all locations along their lengths.

- (1) Note. Horizontal, parallel dip bars are proper for this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 25, for a gymnastic horse having parallel pommel handles.

**42 Separately adjustable:**

This subclass is indented under subclass 41. Subject matter wherein one of the stationary rods is movable to a different stationary position such that the equal distance is maintained.

**43 Harness for supporting user:**

This subclass is indented under subclass 38. Subject matter wherein the acrobatic apparatus includes a strap, belt, or yokelike structure for holding the user while performing acrobatically on the horizontal rod.

SEE OR SEARCH CLASS:

- 54, Harness for Working Animal, for animal harnesses for a draft purpose alone or also having a breaking and training purpose.
- 119, Animal Husbandry, particularly subclasses 856+ and 907 for an animal harness in general.

**44 HAND, WRIST, OR FINGER:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to conditioning or developing a muscle found in a region beyond a forearm of the user, i.e., a hand, wrist, or finger muscle.

SEE OR SEARCH CLASS:

- 84, Music, subclasses 465+ for an exercise device for a musician.

**45 Involving wrist rotation:**

This subclass is indented under subclass 44. Subject matter wherein a wrist must be moved in a turning motion to operate the apparatus.



- 46 About axis perpendicular to forearm:**  
This subclass is indented under subclass 45. Subject matter wherein the wrist turning motion is around a rotational axis situated at approximately a right angle to an arm portion adjacent to the wrist being conditioned or developed.
- 47 Having individual structure engaging each finger used:**  
This subclass is indented under subclass 44. Subject matter wherein the apparatus includes a separate component or portion for contacting and cooperating with each finger being employed.
- (1) Note. While plural fingers are normally used and engaged, a single finger alone may be used and engaged.
- 48 Finger loop:**  
This subclass is indented under subclass 47. Subject matter wherein the separate component or portion encircles the finger being used in a ringlike manner.
- 49 Grip:**  
This subclass is indented under subclass 44. Subject matter wherein the apparatus includes structure intended to be operated by the hand of the user for conditioning or developing a muscle used for grasping.
- 50 Having weight feature (e.g., dumbbell, etc.):**  
This subclass is indented under subclass 49. Subject matter wherein the grasp conditioning or developing structure further includes a part or portion which conditions or develops a muscle by providing a user opposing force derived from the force that gravity exerts upon its mass.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
93+, for user manipulated weights in general and subclass 108, in particular, for a dumbbell, per se.
- 51 INVOLVING USER TRANSLATION OR PHYSICAL SIMULATION THEREOF:**  
This subclass is indented under the class definition. Subject matter wherein the apparatus is used to condition or develop a muscle

employed as the user travels a distance or the user imitates bodily traveling a distance.

- (1) Note. The user may travel, or imitate traveling, the distance on foot, e.g., by walking, hopping, jogging, etc., in the water, e.g., by swimming, etc., or by using travel enhancing apparatus, e.g., snow or water skis, skates, bicycles, rowboats, surfboards, etc.
- (2) Note. Conditioning or developing a muscle includes helping the user, e.g., an infant, ambulant invalid, or novice to walk, ski, skate, etc., or learn how to walk, ski, skate, etc., unless provided for elsewhere (see Search notes below).
- (3) Note. See the Class Definition and the Search Class notes thereunder of Class 297, Chairs and Seats, for the line between that class and Class 280, Land Vehicles, regarding related apparatus found in those classes.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 14+, for a device related to running over a measured distance in a track or field sport.
- 27+, for a trampoline used in gymnastics or for jogging in place.

SEE OR SEARCH CLASS:

- 104, Railways, particularly subclass 62 for a rail guided vehicle traveling along a fixed track and used for physical training.
- 135, Tent, Canopy, Umbrella, or Cane, particularly subclasses 65+ for a cane, stick, crutch or the like designed to aid in human locomotion or to similar structure in umbrella shafts and swagger sticks when useful for aiding human locomotion and subclass 67 for a walker, per se, (i.e., an aid to locomotion which is a free standing support, having two handles by which it is gripped and is operated by lifting from, moving across and replacing on the ground, floor, etc., and which does not have a seat, path control, or propulsion facilitating means, e.g., wheels, casters, etc.).

- 280, Land Vehicles, particularly subclasses 7.1+ for a walker vehicle propelled by a seated occupant and convertible to a different device, e.g., a stroller, etc., subclasses 43+ for a walker having retractable wheels, subclasses 87.021+ for a wheeled, weight bearing, walker propelled by contact of a hand or foot of an occupant with a surface over which the walker travels and which is unrestricted as to path, except by a wheel or wheel mounting, subclasses 200+ for a wheeled vehicle having other types of positive propelling means, subclasses 638+ for a wheeled vehicle which allows a physical dimension thereof to vary, e.g., a folding vehicle, etc., subclasses 809+ for a skier or skater appliance or attachment including a hand held ski pole and subclasses 841+ for a skate or ski, per se.
- 297, Chairs and Seats, particularly subclasses 5+ for a walker provided with a seat whereby the user may either stand or sit. The seat may be occupied for resting between successive exercising periods of walking, skiing, skating, etc., and may include a mere recitation of wheels or running gear. See (3) Note above.
- 472, Amusement Devices, subclasses 14+ for an occupant propelled roundabout device which carries the occupant along a circuitous path and which can enable the occupant to simulate travelling a distance, even if for an exercise purpose, subclass 48 for an amusement walkway or passageway having a movable floor or stair step, subclasses 85+ for a race track or accessory therefor, subclasses 92+ for a surface or enclosure for an athletic or exhibition event, subclass 127 for a body supporting simulated log rolling device, i.e., a birling device, subclass 130 for an aircraft or space vehicle amusement simulation or simulation of the movement thereof and subclass 136 for an amusement building or part thereof.
- 52 Stair climbing:**  
This subclass is indented under subclass 51. Subject matter wherein significance is attributed to conditioning or developing a muscle employed as the user ascends or descends a set of steps or operates apparatus which imitates ascending or descending a set of steps.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
35+, for a play area climbing or traversing arrangement for a juvenile user.  
37, for arm or hand type climbing arrangement.
- SEE OR SEARCH CLASS:  
472, Amusement Devices, particularly subclass 48 for an amusement walkway or passageway having a movable floor or stair step.
- 53 Utilizing fluid resistance:**  
This subclass is indented under subclass 52. Subject matter wherein a liquid or a gas is used to apply a force in opposition to the muscle of the user.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
58, for bicycle riding type exercise apparatus using fluid resistance to apply a force in opposition to a muscle of the user.  
73, for rowing type exercise apparatus using fluid resistance to apply a force in opposition to a muscle of the user.  
112+, for a user manipulated, force resisting apparatus utilizing hydraulic or pneumatic force resistance and employing a confined liquid or gas.
- 54 Treadmill for foot travel:**  
This subclass is indented under subclass 51. Subject matter wherein the muscle conditioning or developing apparatus is a movable surface, e.g., a roller, endless belt, etc., upon which the user may walk or run while remaining in essentially the same location relative to a fixed supporting surface, e.g., a floor, etc.

## SEE OR SEARCH CLASS:

472, Amusement Devices, particularly subclass 48 for an amusement walkway or passageway having a movable floor or stair step and subclasses 90+ for a surface for a skiing or a skating vehicle, e.g., for skis, ice or roller skates, etc., including a sloped treadmill used to imitate a ski slope.

55

**Swimming:**

This subclass is indented under subclass 51. Subject matter wherein significance is attributed to conditioning or developing a muscle employed as the user directly propels his/her body through water, i.e., by swimming, or operates a mechanism which imitates swimming.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

26, for a projector, e.g., a diving board, etc., which may be employed to thrust the user into the air for an acrobatic purpose.  
111, for user manipulated force resisting apparatus using fluid resistance to oppose the user.

## SEE OR SEARCH CLASS:

441, Buoys, Rafts, and Aquatic Devices, particularly subclasses 55+ for a swimming aid to increase stroke efficiency.

56

**Out of water type:**

This subclass is indented under subclass 55. Subject matter wherein the conditioning or developing of the muscle occurs without the user needing to enter any body of water.

57

**Bicycling:**

This subclass is indented under subclass 51. Subject matter wherein significance is attributed to conditioning or developing a muscle employed as the user propels a tandem wheeled vehicle by foot pedals, i.e., pedals a bicycle, or operates apparatus which imitates foot pedaling a bicycle.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

115+, for a frictional, user manipulated, force resisting apparatus having a rotating or arcuately oscillating member.

## SEE OR SEARCH CLASS:

280, Land Vehicles, particularly subclasses 200+ for a bicycle, per se.  
472, Amusement Devices, particularly subclass 21 for an occupant propelled roundabout employing an occupant bearing travel wheel driven by crank structure, e.g., a pedaled cycle, etc.

58

**Utilizing fluid resistance:**

This subclass is indented under subclass 57. Subject matter wherein a liquid or a gas is used to apply a force in opposition to the muscle of the user.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

53, for stair climbing type exercise apparatus using fluid resistance to apply a force in opposition to a muscle of the user.  
73, for rowing type exercise apparatus using fluid resistance to apply a force in opposition to a muscle of the user.  
111+, for a user manipulated, force resisting apparatus using fluid resistance to oppose the user.

59

**Gas:**

This subclass is indented under subclass 58. Subject matter wherein matter in a gaseous state, e.g., air, etc., is used to apply the opposing force.

60

**Completely detached from user support:**

This subclass is indented under subclass 57. Subject matter wherein the apparatus for conditioning or developing a muscle is entirely separate from any structure used to hold the user when operating the apparatus.

(1) Note. The user support need not be claimed and often consists of a chair, bed, floor, etc.

**61 Stand for converting bicycle:**

This subclass is indented under subclass 57. Subject matter wherein a self supporting apparatus is used to support a bicycle type vehicle in a substantially spaced relationship to a generally horizontal supporting surface, e.g., a floor, etc., thus transforming the bicycle from a transporting vehicle into a relatively stationary apparatus for conditioning or developing a muscle of the user.

## SEE OR SEARCH CLASS:

- 248, Supports, particularly subclasses 127+ for a stand in general.  
280, Land Vehicles, particularly subclasses 1.188, 7.1+, 30+, and 47.18 for a land vehicle convertible to another device.

**62 Including upper body exercise feature:**

This subclass is indented under subclass 57. Subject matter wherein structure for conditioning or developing a muscle located above the waist of the user is provided.

- (1) Note. While a muscle above the waist of the user may be somewhat involved in pedaling a bicycle, this subclass provides for exercising such a muscle in excess of what would be required by a bicycle foot pedaling motion alone.

**63 Utilizing specific resistance generating structure:**

This subclass is indented under subclass 57. Subject matter wherein the force for opposing the user is derived through a particular force opposing component.

- (1) Note. Details of the resistance generating structure must be positively claimed for proper document classification herein as an original.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 58+, for similar apparatus which uses a liquid or gas to apply a user opposing force.

**64 Flywheel with braking band:**

This subclass is indented under subclass 63. Subject matter wherein the particular force opposing component consists of a user propelled rotating wheel with a heavy rim having a circumferential edge in direct frictional engagement with a thin, elongated strip of flexible material.

**65 Wheel with edge engaging braking roller:**

This subclass is indented under subclass 63. Subject matter wherein the particular force opposing component consists of a user propelled ring or disk, e.g., a tire, flywheel, etc., revolving about its central axis being radially and forcefully engaged along its circumferential edge by a round member revolving about an axis parallel to that of the ring or disk.

**66 Occupant propelled support frame having movement facilitating feature for foot travel:**

This subclass is indented under subclass 51. Subject matter wherein the apparatus is a user relocatable, body holding assemblage including structure, e.g., a runner, caster, etc., for easing the relocation of the entire assemblage as the user moves along a land or floor surface in a step by step manner, e.g., in a walking or skating manner, etc.

- (1) Note. See the Search Class notes under subclass 51 of this class for other classes containing occupant propelled apparatus.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 57+, for apparatus propelled by the user through the use of foot pedals.  
69, for a device which suspends the user from above and in which the user may propel himself along, but in which the entire supporting assemblage is not propelled by the user.  
72+, for apparatus propelled by the user through the use of oars.

## SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclass 15 for a trainer for foot travel, e.g., walking, skating, etc., limited to travel along a circuitous path,

even if for an exercise purpose (see (2) Note of subclass 51 above).

67

**Armpit engaging:**

This subclass is indented under subclass 66. Subject matter wherein the user body holding assemblage contacts an area under an arm at its connection to the body of the user.

## SEE OR SEARCH CLASS:

297, Chairs and Seats, subclass 411.1 for an armpit engaging body rest for supporting a seated occupant.

68

**Rolling:**

This subclass is indented under subclass 66. Subject matter wherein the relocation easing structure rotates as it is used.

- (1) Note. See the Class Definition and the Search Class notes thereunder of Class 297, Chairs and Seats, for the line between that class and Class 280, Land Vehicles, regarding related apparatus found in those classes. Furthermore, a wheeled occupant propelled support frame used merely to stabilize or catch the occupant but never used to routinely support the weight of the occupant is not proper for Class 280 and is found in this subclass unless seat structure for Class 297 or roundabout structure for Class 472, Amusement Devices, is claimed thus causing classification therein.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

67, for an armpit engaging occupant propelled frame which may have rolling, propulsion facilitating structure.

## SEE OR SEARCH CLASS:

280, Land Vehicles, particularly subclasses 7.1+ for a walker vehicle propelled by a seated occupant and convertible to a different device, e.g., a stroller, etc., subclasses 43+ for a walker having retractable wheels, subclasses 87.021+ for a wheeled, weight bearing, walker propelled by contact of a hand or foot of an occupant with a surface over which the walker travels and which is unre-

stricted as to path, except by a wheel or wheel mounting.

297,

Chairs and Seats, particularly subclasses 5+ for a walker provided with a seat whereby the user may either stand or sit. The seat may be occupied for resting between successive exercising periods of walking, skiing, skating, etc., and may include a mere recitation of wheels or running gear. See (1) Note above.

472,

Amusement Devices, particularly subclass 15 for an occupant propelled roundabout type trainer for foot travel, e.g., walking, skating, etc.

69

**Occupant suspended from above (e.g., by a body harness, etc.) for foot travel:**

This subclass is indented under subclass 51. Subject matter wherein the user is supported in a hanging manner by structure positioned overhead as the user moves along a land or floor surface in a step by step manner, e.g., in a walking or skating manner, etc.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

66+, for an occupant propelled frame which may suspend the occupant from above and in which the user propels the entire frame.

## SEE OR SEARCH CLASS:

472, Amusement Devices, particularly subclass 15 for a trainer for foot travel, e.g., walking, skating, etc., limited to travel along a circuitous path, even if for an exercise purpose (see (2) Note of subclass 51 above).

70

**Having separate foot engaging members reciprocating on parallel guide tracks, e.g., Nordic skiing simulator, etc.:**

This subclass is indented under subclass 51. Subject matter wherein the apparatus includes a pair of individual user foot contacting elements separately capable of controlled movement back and forth along a set of evenly spaced rail-like elements.

- (1) Note. The separate reciprocating foot engaging members permit the legs of the user to alternately move in a back and forth motion, e.g., to imitate leg motion

necessary to propel a user when Nordic (cross country) skiing.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 71, for apparatus which may simulate Alpine (downhill) or towed, e.g., water, etc., skiing in which the user provides only insignificant propelling force. See the (1) Note thereunder.
- 72, for apparatus which may include track guided foot engaging members which must reciprocate in unison while simulating rowing a boat.

### 71 **Alpine or towed skiing:**

This subclass is indented under subclass 51. Subject matter wherein significance is attributed to conditioning or developing a muscle employed as the user rides a pair of long, flat, foot-attached runners and glides over a land or water surface while being propelled primarily by an external pulling force, e.g., gravity, a pulling vehicle, etc., or operates apparatus which simulates such riding and gliding.

- (1) Note. The user generally only provides insignificant propelling thrust, e.g., for starting down a ski slope, for positioning prior to, or immediately after, skiing down a ski slope, etc. Nordic (cross country) skiing, or the simulation thereof, which involves significant user generated propulsion, is thereby excluded from this subclass. If a patent related to skiing exercise is silent as to the type of propulsion involved, it may be placed in this subclass, if not provided for in a subclass above.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 66+, for an occupant propelled support frame having a movement facilitating feature and which may be used when skiing or simulating skiing.
- 69, for apparatus for suspending an occupant from above, e.g., a body harness, etc., which may be used when skiing or simulating skiing.
- 70, for apparatus having separate foot engaging members for reciprocating on parallel guide tracks in a manner

similar to Nordic (cross country) skiing.

- 146, for a swivelled foot platform which supports the entire body of the user.

SEE OR SEARCH CLASS:

- 280, Land Vehicles, particularly subclasses 601+ for snow ski apparatus and subclass 842 for a skate type vehicle intended to simulate skiing over snow but used on dry land.
- 441, Buoys, Rafts, and Aquatic Devices, particularly subclasses 68+ for water ski apparatus.
- 472, Amusement Devices, particularly subclasses 88+ for a surface for a skating or skiing vehicle, e.g., for skis, ice or roller skates, etc.

### 72 **Rowing:**

This subclass is indented under subclass 51. Subject matter wherein significance is attributed to conditioning or developing a muscle employed as the user propels a boat through water with oars, i.e., rows, or operates apparatus which imitates rowing.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 70, for apparatus having separate foot engaging members for reciprocating on parallel guide tracks.

### 73 **Utilizing fluid resistance:**

This subclass is indented under subclass 72. Subject matter wherein a liquid or gas is used to apply a force in opposition to the user.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 53, for a stair climbing type exercise apparatus using fluid resistance to apply a force in opposition to the user.
- 58+, for a bicycle type exercise apparatus using fluid resistance to apply a force in opposition to the user.
- 111+, for user manipulated force resisting apparatus utilizing fluid resistance to oppose the user.

### 74 **Jogging accessory:**

This subclass is indented under subclass 51. Subject matter wherein significance is attributed to apparatus used to supplement or

enhance the conditioning or developing of a muscle employed as the user runs.

- (1) Note. A weight worn or carried while running should not be classified as an original in this subclass since a weight of this type is frequently used for a wide variety of nonrunning exercises.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 14+, for apparatus involving running over a measured distance in a track or field sport, particularly subclass 19 for a starting block for a runner.
- 27+, for a trampoline which may be used for jogging in place.
- 54, for a treadmill which may be used to help simulate jogging.
- 93+, for weights which may be carried while jogging, particularly subclass 105 for weights worn on the body while exercising, e.g., jogging, etc.

SEE OR SEARCH CLASS:

- 215, Bottles and Jars, for a water bottle, per se, without any exercise enhancing feature.
- 222, Dispensing, for a water dispensing container, per se, without any exercise enhancing feature.

#### 75 **Elevated walking device (e.g., stilts, etc.):**

This subclass is indented under subclass 51. Subject matter wherein the apparatus separately supports each foot at a height above the ground as the user moves about in a step by step manner, e.g., walking on a pair of long, foot supporting poles, etc.

- (1) Note. While the intended use of this type of apparatus is not always clearly set forth as being exercise, the apparatus has been historically considered to be a form of exercise or athletic device which, by its nature, often makes exercising more enjoyable. A body attached stilt, regardless of intended use, is not proper for this subclass since it is provided for elsewhere (see the Search Class notes below).

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 77, for a device which often elevates a user and upon which the user bounces about a supporting surface, e.g., ground, floor, etc.

SEE OR SEARCH CLASS:

- 135, Tent, Canopy, Umbrella, or Cane, particularly subclasses 65+ for a cane, stick, crutch, or other walking aid.
- 623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefore, subclasses 28+ for a body attached stilt.

#### 76 **Stilt having specific step:**

This subclass is indented under subclass 75. Subject matter wherein a long, foot supporting pole has attached thereto, a particular foot engaging, support member.

- (1) Note. To be proper for placement in this subclass as an original classification, the exercise equipment must have a significantly claimed step feature. A mere recitation of a named step feature would be excluded from this subclass if no further details are claimed. A cross reference copy based upon a more complete disclosure could, of course, be provided.

SEE OR SEARCH CLASS:

- 248, Supports, subclasses 243+ and 295.11+ for a device relating to a stilt step but of wide application as an adjustable bracket.

#### 77 **Bouncing device:**

This subclass is indented under subclass 51. Subject matter whereby the apparatus supports the user for bounding about on a supporting surface, e.g., ground, floor, etc.

- (1) Note. This subclass provides for apparatus whose primary purpose is bouncing exercise. Movement over the ground, floor, etc., is often in random directions as, for example, when a child sits on a large ball type apparatus and bounces vertically while moving randomly about in a horizontal direction.

- (2) Note. While the intended use of this type of apparatus is not always clearly set forth as being exercise, the apparatus has been historically considered to be a form of exercise or athletic device which, by its nature, often makes exercising more enjoyable.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 121+, for a resilient, user manipulated, force resisting apparatus.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, particularly subclasses 274+ for an oscillating baby jumper type suspending apparatus.  
472, Amusement Devices, particularly subclass 135 for an occupant operated bouncing device wherein user translation over a floor or ground surface is limited by the device.

**78 User inside device:**

This subclass is indented under subclass 51. Subject matter wherein the apparatus is large enough to substantially enclose the body of the user within its boundaries, while the user causes movement of the apparatus over a supporting surface, e.g., ground, floor, etc.

SEE OR SEARCH CLASS:

- 280, Land Vehicles, subclasses 206+ for a wheeled land vehicle operated with by a user located within the wheel and used primarily for travel.  
441, Buoys, Rafts, and Aquatic Devices, subclass 78 for a spheroidal or wheel-like water walking device which encircles a user and is used primarily for travel.

**79 FOR FOOT OR ANKLE:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to conditioning or developing a muscle found in a region below a shin of the user, i.e., a foot or ankle muscle.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 146, for a swivelled foot platform which supports the entire body of the user

and is not significantly limited to conditioning or developing a muscle of the foot or ankle.

**80 Foot pedal pivots about single horizontal axis:**

This subclass is indented under subclass 79. Subject matter wherein the foot or ankle muscle is conditioned or developed by using a foot engaging lever which swings about a lone axial region which is perpendicular to vertical, i.e., about a single horizontal axis.

**81 SKIPPING:**

This subclass is indented under the class definition. Subject matter wherein the user leaps over moving apparatus.

- (1) Note. While the intended use of this type of apparatus is not always clearly set forth as being exercise, the apparatus has been historically considered to be a form of exercise or athletic device which, by its nature, often makes exercising more enjoyable.

**82 Handheld jump rope:**

This subclass is indented under subclass 81. Subject matter wherein the moving apparatus includes a flaccid, hand supported, line member swung in an arcuate path over the head and under a leaping foot of the user.

- (1) Note. The hands supporting the apparatus need not be those of the user.  
(2) Note. The line member may include a rigid portion or series of rigid portions, e.g., a chain, etc., as long as the member as a whole acts in a flaccid manner.

**83 STRIKING:**

This subclass is indented under the class definition. Subject matter wherein a muscle of the user is conditioned or developed by hitting the apparatus.

**84 Having indicator:**

This subclass is indented under subclass 83. Subject matter wherein the apparatus includes structure for displaying a measure of intensity of user muscle conditioning or developing, e.g., quantity, quality, etc.



- (1) Note. In the Class Definition above see,  
(2) Note. for the line with Class 73, Measuring and Testing.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
1+, for an exercise device including an electrical indicator.  
909, for a mechanical indicator art collection having structure for displaying some exercise parameter.
- SEE OR SEARCH CLASS:  
73, Measuring and Testing, particularly subclasses 379.01+ for a device for measuring and testing of muscular strength.  
116, Signals and Indicators, for a mechanical signal or indicator, per se.  
340, Communications: Electrical, particularly subclasses 573+ for an electrical alarm or indicator responsive to a condition of a human body or animal.
- 85 Having bottom weighted rocker support:**  
This subclass is indented under subclass 83. Subject matter wherein the apparatus includes a heavy, rounded, ground engaging base portion which permits the apparatus to sway back and forth when hit by the user.
- 86 Multidirectionally movable bag or pad:**  
This subclass is indented under subclass 83. Subject matter wherein the apparatus being hit is a filled flexible pouch or cushioned structure which, when hit, is capable of movement along a variety of paths depending on the alignment of the hit.
- 87 Specifically supported:**  
This subclass is indented under subclass 86. Subject matter wherein the flexible pouch or cushioned structure is held or suspended by particular holding or suspending structure.
- (1) Note. To be proper for placement in this subclass as an original classification, a significant support feature must be claimed. A mere recitation of a named support feature would be excluded from this subclass if no further details are claimed. A cross reference copy based upon a more complete disclosure could, of course, be provided.
- 88 On a person:**  
This subclass is indented under subclass 87. Subject matter wherein the holding or suspending structure is mounted on either the user or another human being, e.g., a sparring partner, etc.
- 89 From connections above and below:**  
This subclass is indented under subclass 87. Subject matter wherein the holding or suspending structure is directly attached to the flexible pouch or cushioned structure at both upper and lower portions thereof.
- (1) Note. A bag or pad directly supported at only one location or elevation but indirectly supported through other supporting structure which is located both above and below it, e.g., floor and ceiling mounted support structure, etc., is excluded from this subclass.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
88, for a bag or pad attached at multiple points to a user or other person, e.g., a sparring partner, etc.
- 90 By floor or ground only:**  
This subclass is indented under subclass 87. Subject matter wherein the holding or suspending structure rests on or is attached to an underlying horizontal surface, e.g., a floor or the ground, etc., alone.
- 91 ISOMETRIC:**  
This subclass is indented under the class definition. Subject matter wherein the human user applies pressure against apparatus which is in a stationary dynamic state and wherein the pressure of the user does not change the state.
- (1) Note. In using the isometric apparatus, the user exerts force by contraction of muscles, but does not move the apparatus except to an insignificant degree required to take up slack.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

131+, for a user manipulated force resisting apparatus which utilizes force resistance generated by the user alone.

**92 USER MANIPULATED FORCE RESISTING APPARATUS, COMPONENT THEREOF, OR ACCESSORY THEREFOR:**

This subclass is indented under the class definition. Subject matter (a) wherein the human user maneuvers pressure opposing structure by exerting an operating pressure thereupon to facilitate conditioning or developing of a muscle or (b) consisting of an essential part of, or adjunct used with, such pressure opposing structure.

- (1) Note. A component of a force resisting apparatus or an accessory used with an unclaimed or nominally claimed force resisting apparatus is classified with the particular type of force resisting apparatus disclosed unless specifically provided for elsewhere hereunder.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

93+, for a belt or harness disclosed for use when lifting a weight, particularly subclass 106 if disclosed for use when lifting a barbell.

133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the force resistance apparatus are not claimed.

139, for a user interface element wherein details of the force resistance apparatus are not claimed.

**93 Utilizing weight resistance:**

This subclass is indented under subclass 92. Subject matter wherein the pressure opposing structure derives its opposing pressure from the force which gravity exerts upon a mass as the user maneuvers the mass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

110, for apparatus which requires the user to manipulate the inertia of a mass.

133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the weight force resistance apparatus are not claimed.

139, for a user interface element wherein details of the weight force resistance apparatus are not claimed.

**94 Including stationary support for weight:**

This subclass is indented under subclass 93. Subject matter wherein the pressure opposing structure has a relatively immobile arrangement for holding the mass while the mass is being maneuvered or is at rest.

- (1) Note. The stationary support may be fixedly attached to a wall, door, ceiling, floor, post, the ground, etc., or may just rest upon a horizontal surface, e.g., a floor, the ground, etc., so long as it is relatively immobile with respect thereto. While the support is stationary, it is not necessarily completely static and may have portions or components which move as the weight is being maneuvered.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the weight resistance apparatus are not claimed.

**95 Body part of user utilized as weight:**

This subclass is indented under subclass 94. Subject matter wherein a portion of the physical anatomy of the user is used as the mass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

38+, for a horizontal gymnastic bar including a chinning bar which does not include any user manipulated force resisting apparatus.

- 41+, for parallel, horizontal, gymnastic bars including dip bars which do not include any user manipulated force resisting apparatus.
- 141, for a push-up device which does not include any user manipulated force resisting apparatus.
- 142+, for a support, e.g., bench, slant board, etc., used for supporting the body of the user.
- SEE OR SEARCH CLASS:  
128, Surgery, particularly subclass 75 for an orthopedic device designed to stretch the body or spinal column, suspend the head, etc.
- 96 Entire body:**  
This subclass is indented under subclass 95. Subject matter wherein the mass is the complete physical anatomy of the user.
- 97 Having lever carrying the weight:**  
This subclass is indented under subclass 94. Subject matter wherein the mass holding arrangement includes a member which is swung by the user about a fulcrum while it is bearing the mass to be maneuvered.
- 98 Having guide around or through weight:**  
This subclass is indented under subclass 94. Subject matter wherein the mass holding arrangement includes a path restricting component which either substantially surrounds the mass or which passes in one side and out an opposite side of a substantially surrounding portion of the mass, as the mass is maneuvered.
- 99 And flexible force transmitting linkage element:**  
This subclass is indented under subclass 98. Subject matter wherein the mass holding arrangement also includes a flaccid strand or chain used to help exert the operating pressure on the mass while it is being maneuvered.
- 100 Pivoted user interface element:**  
This subclass is indented under subclass 99. Subject matter wherein the user exerts the operating pressure directly onto a portion of the pressure opposing structure which then swings about an axis.
- 101 Track or way guided user interface element:**  
This subclass is indented under subclass 99. Subject matter wherein the user exerts the operating pressure directly onto a portion of the pressure opposing structure which then moves along a structurally controlled linear or curvilinear path, e.g., by sliding or rolling along a rail-like element, etc.
- 102 Flexible element drawn out through exit guide:**  
This subclass is indented under subclass 99. Subject matter wherein the flaccid strand or chain is pulled outwardly from strand or chain path emergence controlling structure, e.g., a pulley, etc., associated with the pressure opposing structure.
- 103 Relocatable exit guide:**  
This subclass is indented under subclass 102. Subject matter wherein the emergence controlling structure may be repositioned on the pressure opposing structure.
- 104 Barbell support:**  
This subclass is indented under subclass 94. Subject matter wherein the mass holding arrangement holds a mass in the form of a shaftlike member having a weight connected to, or integral with, each end of the bar and which is maneuvered by both hands of the user, i.e., a barbell.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
106+, for a barbell, per se.  
133+, for a common force transmitting frame for supporting both the body of the user and a nominal force resister.
- SEE OR SEARCH CLASS:  
211, Supports: Racks, particularly subclasses 60.1+ for a rack used to store an article with an elongated portion, e.g., a bar, etc., in a nonuse position.
- 105 Weight worn on body of user:**  
This subclass is indented under subclass 93. Subject matter wherein the mass is attached to a portion of the physical anatomy of the user during use.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
 74, for a jogging accessory not involving carrying or wearing of a weight.  
 139, for a user interfacing element, e.g., a handle, belt, etc., for use with other user manipulated force resisting apparatus.
- 106 Handheld bar with weight at each end (e.g., barbell, dumbbell, etc.) or component thereof:**  
 This subclass is indented under subclass 93. Subject matter wherein the pressure opposing structure is (a) a shaftlike member gripped and supported by a hand of the user and having a mass connected to, or integral with, each end thereof or (b) an essential part thereof.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
 94+, for a static support for a claimed weight.  
 104, for a support, per se, used to hold a barbell.
- SEE OR SEARCH CLASS:  
 128, Surgery, particularly subclasses 869+ for a restrainer or immobilizer used for protecting or restraining a patient or an infant.
- 107 Having securing member (e.g., locking collar, etc.) for retaining weight on bar:**  
 This subclass is indented under subclass 106. Subject matter including a fastening member attached to the shaftlike member to maintain the mass in a desired position thereon.
- (1) Note. A securing member having a sole, specifically disclosed utility of retaining a weight on a bar for an exercising purpose is proper for this subclass even if claimed more broadly.
- SEE OR SEARCH CLASS:  
 403, Joints and Connections, for retaining collars used on bars of a more general nature or disclosing plural specific uses and not claiming an exercise related embodiment.
- 108 Bar held by single hand of user (e.g., dumbbell, etc.):**  
 This subclass is indented under subclass 106. Subject matter wherein the user must grip and support the shaftlike member with one hand alone, e.g., a dumbbell, etc.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
 50, for hand grip conditioning or developing apparatus combined with a weight feature, e.g., a dumbbell, etc.  
 109, for an exercise type club which is held in a hand at one end while the major weight is located at the opposite end.
- 109 Club:**  
 This subclass is indented under subclass 93. Subject matter wherein the pressure opposing structure is an elongated apparatus having a major amount of the mass being located near one end and which is held in the hand of the user at its opposite end.
- (1) Note. While a wooden, bottle-shaped "Indian" club or a juggling club is found in this subclass, the elongated apparatus may include any bar arrangement which is held at one end and weighted at the other end.
- SEE OR SEARCH CLASS:  
 463, Amusement Devices: Games, subclasses 47.2+ for a striking type of weapon for use on a human being (e.g., a police club, billy, etc.).  
 473, Games Using Tangible Projectile, subclasses 118+ for a bowling pin used as a target in a bowling game; subclasses 219+ for a swingable implement used to practice for the game of golf, especially subclass 256 for a particularly weighted practice golf club; subclasses 282+ for a golf club; subclass 457 for a bat used to practice or train for a playing field or court game such as baseball; and subclasses 559+ for a player held and powered club used to strike and thereby project a projectile into the air.

**110 Utilizing inertial force resistance:**  
This subclass is indented under subclass 92. Subject matter wherein the pressure opposing structure derives its opposing pressure from the tendency of a motionless mass to remain motionless, a moving mass to remain in motion, or an accelerating or decelerating mass to resist a change in acceleration or deceleration.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 93+, for apparatus which derives its opposing pressure from the force gravity exerts upon a mass as the user manipulates the mass.
- 133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the inertial force resistance apparatus are not claimed.
- 139, for a user interface element wherein details of the inertial force resistance apparatus are not claimed.

**111 Utilizing fluid resistance:**  
This subclass is indented under subclass 92. Subject matter wherein the pressure opposing structure derives its opposing pressure from a liquid or gas.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 53, for apparatus in which significance is attributed to conditioning or developing a muscle employed while stair climbing or simulating stair climbing and which uses a fluid resistance.
- 55+, for apparatus in which significance is attributed to conditioning or developing a muscle employed while swimming or simulating swimming.
- 73, for apparatus in which significance is attributed to conditioning or developing a muscle employed while rowing or simulating rowing and which uses a fluid resistance.
- 133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and

- wherein details of the fluid resistance apparatus are not claimed.
- 139, for a user interface element wherein details of the fluid resistance apparatus are not claimed.

SEE OR SEARCH CLASS:

- 441, Buoys, Rafts, and Aquatic Devices, particularly subclasses 55+ for a swimming aid to increase stroke efficiency in water.

**112 Confined hydraulic or pneumatic chamber:**  
This subclass is indented under subclass 111. Subject matter wherein the pressure opposing structure uses an enclosed liquid or gas compartment, e.g., a hydraulic or pneumatic cylinder, bag, etc., to enable the liquid or gas to oppose the user.

- (1) Note. While the chamber substantially encloses the liquid or gas, it may include an escape valve or port for releasing or admitting the liquid or gas as the apparatus is manipulated by the user. The container does not contain the user.

**113 Including external conduit structure:**  
This subclass is indented under subclass 112. Subject matter wherein the pressure opposing structure is provided with fluid duct-work circuitry outside the enclosed liquid or gas compartment to restrict liquid or gas flow to or from the compartment as it provides the pressure to oppose the user.

**114 Utilizing frictional force resistance:**  
This subclass is indented under subclass 92. Subject matter wherein the pressure opposing structure derives its opposing pressure from the opposition to relative movement of two surfaces in adjacent, e.g., rubbing, etc., contact as they tend to be moved relative to each other as the user maneuvers the pressure opposing structure.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the frictional force resistance apparatus are not claimed.

- 139, for a user interface element wherein details of the frictional force resistance apparatus are not claimed.
- 115 Including rotating friction element:**  
This subclass is indented under subclass 114. Subject matter wherein one of the surfaces is on a member which turns about an axis.
- (1) Note. Included in this subclass are devices in which one of the members turns completely about an axis, i.e., 360 degrees or more, or oscillates, i.e., turns to and fro with less than 360 degrees of motion.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
57+, for apparatus utilizing a bicycle type foot pedal crank.
- 116 Having return mechanism:**  
This subclass is indented under subclass 115. Subject matter wherein the pressure opposing structure includes a structural arrangement causing the turning member to go back toward a position held prior to being maneuvered by the human user.
- 117 Ball and socket friction elements:**  
This subclass is indented under subclass 115. Subject matter wherein one of the contacting surfaces is on a spherically shaped member and mates with the other surface which is on a partially surrounding member.
- (1) Note. Either of the ball or the socket contacting surfaces may be on the turning member.
- 118 Disk or ring friction element or portion thereof:**  
This subclass is indented under subclass 115. Subject matter wherein one of the contacting surfaces is on a flat, circular member having a diameter at least as great as its axial length, i.e., a disk or ring, or an arcuate segment thereof.
- 119 Edge engaging braking element:**  
This subclass is indented under subclass 118. Subject matter wherein the other contacting surface is on a member which applies radial pressure to an arcuate perimeter portion of the disk, ring, or segment thereof.
- 120 Including rope element wrapped about another element:**  
This subclass is indented under subclass 114. Subject matter wherein one of the surfaces is on a flaccid, filamentary member which is convoluted around a different member and moves therealong while in adjacent contact therewith.
- (1) Note. The different member may, for example, rotate at a peripheral speed slower than that of the rope, include curved surfaces which are in close contact with the moving rope, be a stationary cylindrical member, etc.
- 121 Utilizing resilient force resistance:**  
This subclass is indented under subclass 92. Subject matter wherein the pressure opposing structure derives its opposing pressure from a yielding elastic element that opposes deformation thereof and tends to return to its original form.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
77, for a bouncing device which includes a resilient element for producing vertical bouncing of the equipment as it is operated by the user.  
133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the resilient force resistance apparatus are not claimed.  
139, for a user interface element wherein details of the resilient force resistance apparatus are not claimed.
- 122 And user supplied counter force:**  
This subclass is indented under subclass 121. Subject matter wherein the pressure opposing structure also includes a first part engaged by a portion of the user exerting pressure thereon while an opposing part is engaged by another portion of the user to exert an equal opposing pressure thereon.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
131, for apparatus wherein part of the user body is pitted against another part of the user body in direct one-to-one opposition.
- 123 Against user occupied platform:**  
This subclass is indented under subclass 122. Subject matter wherein the opposing part of the pressure opposing structure is secured to a user supporting structure to exert the opposing pressure.
- (1) Note. The entire user body need not be supported by the platform.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the resilient force resistance apparatus are not claimed.
- 124 Attached to user:**  
This subclass is indented under subclass 122. Subject matter wherein one of the user engaged parts of the pressure opposing structure is secured to one of the engaging portions of the user.
- 125 User leg supplies counter force to user arm:**  
This subclass is indented under subclass 122. Subject matter wherein the pressure opposing structure uses a lower limb of the user to exert an equal opposing pressure against an upper limb of the user.
- 126 Having pair of handles:**  
This subclass is indented under subclass 122. Subject matter wherein the pressure opposing structure includes hand engaging structure on both parts thereof to enable the user to grasp each part with a separate hand.
- 127 Torsion type resister:**  
This subclass is indented under subclass 121. Subject matter wherein the yielding elastic element opposes deformation caused by the user applying a twisting pressure on it.
- 128 Linearly compressed resister:**  
This subclass is indented under subclass 121. Subject matter wherein the yielding elastic element opposes deformation caused by the user applying a length shortening pressure on it along a straight line.
- 129 Resilient component attached to stationary support:**  
This subclass is indented under subclass 121. Subject matter wherein a part of the yielding elastic element is secured to a nonmoving structure which furnishes an unyielding opposing pressure.
- 130 Stationary support serves as common support for user:**  
This subclass is indented under subclass 129. Subject matter wherein the nonmoving structure furnishing the unyielding opposing pressure is also configured to hold a portion of the body weight of the user.
- (1) Note. The stationary structure in this subclass provides all of the opposing force for the elastic member. This distinguishes from the apparatus found in subclass 123 where the user on a platform provides the opposing force, e.g., due to the weight of the user, etc.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the resilient force resistance apparatus are not claimed.
- 131 Utilizing force resistance generated by user only:**  
This subclass is indented under subclass 92. Subject matter wherein the human user applies the operating pressure against pressure opposing structure which derives its opposing pressure solely from another part of the body of the user.
- (1) Note. The resisting force is normally derived from a muscle contraction. Specifically included herein is a self-manipulated device wherein a self-applied

stress, i.e., a force applied by a muscle, is resisted by a force that originates passively from strain, i.e., deformation resulting from the force, within the body of the user, e.g., by stretching of the body, etc. The parts of the body are pitted against each other in direct one-to-one relationship via a mechanical motion transmission means. This distinguishes from the apparatus of subclasses 122+, for example, where a spring is an intermediate component.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 91, for isometric force resisting apparatus having dynamically stationary pressure opposing structure and wherein the pressure of the user does not change that state. See the (1) Note under that subclass.
- 122+, for a resilient force resisting apparatus also utilizing a user supplied counter force.
- 133+, for a frame which supports both the user and force resisting apparatus while force exerted by the user is transmitted through the frame and wherein details of the force resistance apparatus are not claimed.
- 139, for a user interface element wherein details of the force resistance apparatus are not claimed.

### 132 **Rolled by or against user:**

This subclass is indented under subclass 131. Subject matter wherein the pressure opposing structure is facilitated in its use by a rounded ball, wheel, or cylinder type structure which rotates in tangential contact with either a support therefor or the body of the user.

- (1) Note. Included in this subclass is, for example, a carriage for a rotatable wheel used to support a part of the weight of the user while the user moves his/her body relative to a floor, wall, etc., and then returns to an original position, pulling and stretching the body against itself with the help of the rolling carriage. Also included is a rotatable roller which the user moves his/her body against, thereby opposing one part of his/her against another.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 95, for apparatus utilizing the body weight of the user as a manipulated weight resistance.

### 133 **Having common force transmitting support frame for user and for force resister:**

This subclass is indented under subclass 92. Subject matter including a structure which sustains both the body of the user and the pressure opposing structure while transmitting the pressure exerted by the user through the structure to the pressure opposing structure.

- (1) Note. Nominal resister limitations may be claimed, e.g., a named weight, spring, etc. (See (1) Note under subclass 92).

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 94+, for user manipulated force resisting apparatus including statically supported weight resistance where details of the weight resistance apparatus are claimed.
- 104, for a support used to hold a barbell in position and which may additionally support the user.
- 121+, particularly subclass 130, for a user manipulated force resisting apparatus including a static support for the user and a resilient force resister where details of the resilient force resister are claimed.
- 142, for a support, e.g., bench, slant board, etc., which sustains the user during unconstrained exercise movements.

### 134 **Including stationary restraint for user:**

This subclass is indented under subclass 133. Subject matter having an immobile holding means to prevent a body part of the user from moving while the user exerts pressure through another portion of the pressure transmitting structure.

- (1) Note. The body part of the user is held stationary to enable another body part of the user to be moved for an exercising purpose. A mere chair or rest is not considered to positively restrain the user.



**135 Including single, movable, interface element following predetermined path:**

This subclass is indented under subclass 133. Subject matter wherein the pressure transmitting structure has a solitary, relocatable, user engaging component travelling along a prescribed alignment.

- (1) Note. the movement along the predetermined path is usually intended to isolate a single muscle or muscle group. Separate hand or foot engaging interface elements which act as a single element are included hereunder. A single element used for both leg curl and leg extension exercises is proper for this subclass.

**136 Rotatably movable:**

This subclass is indented under subclass 135. Subject matter wherein the relocatable user engaging component travels along an arcuate alignment about an axial region.

**137 About a horizontal axis:**

This subclass is indented under subclass 136. Subject matter wherein the axial region is oriented perpendicular to vertical, i.e., horizontally.

**138 Including plural, movable, interface elements for multiple exercises:**

This subclass is indented under subclass 133. Subject matter wherein the pressure transmitting structure has more than one relocatable, user engaging component for separately conditioning or developing the muscles of more than one part of the body of the user.

- (1) Note. The movement must occur during exercise, not as an adjustment to the exercise device.

**139 User interface element:**

This subclass is indented under subclass 92. Subject matter wherein significance is attributed to a component of the pressure opposing structure which is directly engaged by the user.

- (1) Note. This subclass provides for a handle or belt or other user worn or user handled element which is clearly part of an exercise apparatus, but in which the exerciser is of lesser significance than is

the force resisting element to which it is attached (see (1) Note under subclass 92).

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 81, for a skipping device often attached to the body of the user.  
 105, for a weight resistance device worn on the body of the user and in which significant weight resistance details are claimed.  
 124, for a resilient resistance device having a user supplied counter force and which is attached to the user and in which significant resilient resistance device details are claimed.  
 126, for a resilient resistance device having a user supplied counter force and which has a pair of handles to be grasped by the user and in which significant resilient resistance device details are claimed.

**140 SIT UP DEVICE:**

This subclass is indented under the class definition. Subject matter wherein the apparatus facilitates the conditioning or developing of a muscle of the user by the user raising and lowering his/her upper body between an upward facing prone position and a seated position primarily by contraction of the abdominal muscles, i.e., while doing a sit up.

**141 PUSH UP DEVICE:**

This subclass is indented under the class definition. Subject matter wherein the apparatus facilitates the conditioning or developing of a muscle of the user who, while in a downward facing prone position, raises and lowers his/her upper body by alternately bending and straightening an arm, i.e., while doing a push up.

**142 SUPPORT FOR ENTIRE BODY OF USER (E.G., BENCH, SLANT BOARD, ETC.):**

This subclass is indented under the class definition. Subject matter wherein the apparatus sustains the complete weight of the user in a position to facilitate conditioning or developing a muscle.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 23+, for a gymnastic type support upon which the user may raise or lower his/her body, particularly subclass 38 for a horizontal chinning bar and subclass 41 for horizontal, parallel dip bars.
- 51+, for apparatus involving user translation or physical simulation thereof which also often supports the entire body of the user during exercise.
- 104, for a barbell support, per se, or a barbell support combined with a support for the body of the user.
- 133+, for an exercise device having a frame that supports both a force resister and a user thereof. Also see (1) Note thereunder.

**143 Suspension device:**

This subclass is indented under subclass 142. Subject matter wherein the weight sustaining apparatus permits a part of the user body to hang freely from the apparatus.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 24, for a trapeze or rings about which the user may move in an acrobatic manner.
- 38, for a horizontal chinning bar.
- 131, for apparatus utilizing force resistance generated by the user alone to condition or develop a muscle and which may also stretch the body of the user.
- 907, for a collection of apparatus used to stretch the body of a user.

SEE OR SEARCH CLASS:

- 128, Surgery, particularly subclasses 71 and 75 for an orthopedic extension device which stretches or extends a body or spinal column for a therapeutic purpose.

**144 Body inversion:**

This subclass is indented under subclass 143. Subject matter wherein the apparatus is used to hang the complete body of the user upside down.

- (1) Note. The inversion suspension device may pivot about a horizontal axis but, if

used to carry the user in a complete loop, it is classified in Class 472, Amusement Devices.

SEE OR SEARCH CLASS:

- 128, Surgery, particularly subclasses 71 and 75 for an orthopedic extension device which may stretch or extend a body or spinal column by inversion of the user for a therapeutic purpose.
- 472, Amusement Devices, particularly subclasses 16+ for an occupant propelled roundabout which may invert the occupant by rotating him/her completely about a horizontal axis (see (1) Note above).

**145 Including hold down for foot or ankle:**

This subclass is indented under subclass 142. Subject matter wherein the weight sustaining apparatus has a portion secured thereto which embraces or surrounds a part of the body of the user below the shin, i.e., a foot or ankle, to constrain it against movement.

- (1) Note. The hold down is often provided to restrain the feet against moving while the torso is being manipulated.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 140, for a sit up device often employing structure for holding a foot or ankle of a user and which may also support the entire body of the user.

**146 Swivelled foot platform:**

This subclass is indented under subclass 142. Subject matter wherein the weight sustaining apparatus is mounted for arcuately oscillating movement relative to a supporting surface upon which both the user and the apparatus are supported, e.g., the ground, a floor, etc.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 71, for apparatus in which significance is attributed to conditioning or developing a muscle employed while skiing or simulating skiing and which involves swiveling.
- 79, for apparatus in which significance is attributed to conditioning or develop-

ing a muscle of the foot or ankle alone.

SEE OR SEARCH CLASS:

472, Amusement Devices, particularly subclasses 14+ for an occupant propelled roundabout which may rotate in a complete loop or circle for an amusement purpose.

**147 Turns solely about vertical axis:**

This subclass is indented under subclass 146. Subject matter wherein the weight sustaining apparatus arcuately oscillates only around an upright axial region, i.e., a vertical axis.

**148 MISCELLANEOUS:**

This subclass is indented under the class definition. Subject matter not provided for in any of the above subclasses.

CROSS-REFERENCE ART COLLECTIONS

**900 ERGOMETER WITH FEEDBACK TO LOAD OR WITH FEEDBACK COMPARISON:**

Cross-reference art collection of documents relating to exercise apparatus which measures the amount of work done by a muscle under a controlled condition and then transmits it to a resistance applying structure or to structure which will evaluate it relative to another amount.

SEE OR SEARCH THIS CLASS, SUBCLASS:

1+, for exercise apparatus having a specific electrical feature which often includes feedback to a load applying device or with feedback comparison.

SEE OR SEARCH CLASS:

600, Surgery, particularly subclasses 300+ for a diagnostic testing device used for the medical evaluation of the condition of a living body by a diagnostician.

**901 HAVING COMPUTER CIRCUITRY:**

Cross-reference art collection of documents relating to exercise apparatus which includes electrical structure used to perform a data processing or calculating operation.

(1) Note. The computer circuitry may be used to sense, analyze, control, or simulate operation of the exercise device. A plurality of computers may be used to form a network.

SEE OR SEARCH THIS CLASS, SUBCLASS:

1+, for a claimed exercise device having a specific electrical feature which may include a computer or related circuitry, display, feedback, or software therefor.  
902, for an exercise device art collection having computer circuitry and employing image apparatus to which significance is attributed.

SEE OR SEARCH CLASS:

700, Data Processing: Generic Control Systems or Specific Applications, subclasses 91 through 93 for computer analysis, management, monitoring, or scoring of a contest or contestant not otherwise provided for.

**902 Employing specific s:graphic or video display:**

This subclass is indented under subclass 901. Cross-reference art collection wherein the data processing or calculating structure presents its output on a particular pictorial or televised image apparatus.

(1) Note. The pictorial or televised image may be presented on a cathode ray tube (CRT), liquid crystal display (LCD), light emitting diodes (LED), etc., or by using a video processor or video tape controlled by the computer circuitry. Significance should be attributed to the image apparatus for placement in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

901, for an exercise art collection having computer circuitry and employing conventional or nominal image apparatus.

## SEE OR SEARCH CLASS:

- 345, Computer Graphics Processing and Selective Visual Display Systems, appropriate subclasses for displaying image on any kind of output display device.
- 348, Television, subclasses 739+ for video display.
- 349, Liquid Crystal Cells, Elements and Systems, appropriate subclasses for utilizing liquid crystal display devices.

**903 UTILIZING ELECTROMAGNETIC FORCE RESISTANCE:**

Cross-reference art collection of documents relating to exercise apparatus which derives user opposing force from structure which generates electrical energy or which dissipates energy electrically.

- (1) Note. Included in this collection is a device using an electromagnetic, electrostatic or magnetostatic force or a permanent magnet to generate the opposing force.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 1+, for exercise equipment having specific electrical operating, controlling, monitoring, or indication circuitry.

**904 REMOVABLY ATTACHED TO WHEELCHAIR, HOME FURNISHING, OR HOME STRUCTURE:**

Cross-reference art collection of documents relating to exercise apparatus which is intended to be secured temporarily to a wheeled, seated invalid carrying, vehicle, to a household article, e.g., a bed, chair, table, etc., or to specific building structure of a house, e.g., a door frame, door knob, etc.

**905 ARM WRESTLING:**

Cross-reference art collection of documents relating to exercise apparatus which is used while engaging in or practicing for an activity which pits an upper limb, i.e., an arm, of one person against the arm of another person in a contest of strength.

- (1) Note. Arm wrestling is a broad title for a variety of contests also known as wrist wrestling, Indian wrestling, hand wrestling, etc.

## SEE OR SEARCH CLASS:

- 273, Amusement Devices: Games, particularly subclass 452 for a competitive arm wrestling device.

**906 UTILIZING OPPONENT SUPPLIED RESISTANCE:**

Cross-reference art collection of documents relating to exercise apparatus which pits the force developed by one user against an opposing force generated by another user.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 905, for arm wrestling apparatus which pits one person against another.

**907 STRETCHING:**

Cross-reference art collection of documents relating to exercise apparatus which enables the user to lengthen or extend a muscle or related body part.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 131, for apparatus utilizing force resistance generated by the user alone to condition or develop a muscle and which may also stretch the body of the user.
- 143+, for a user suspension device which may be used to stretch the body of the user.

**908 ADJUSTABLE:**

Cross-reference art collection of documents relating to exercise apparatus which includes a feature permitting it to be altered in some manner.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 42, for a separately adjustable, parallel bar type of gymnastic apparatus.

**909 MECHANICAL INDICATOR:**

Cross-reference art collection of documents relating to exercise apparatus which includes

structure for physically displaying some exercise parameter.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 1+, for an exercise device including an electrical indicator.
- 84, for a striking type exercise device having an indicator.

SEE OR SEARCH CLASS:

- 116, Signals and Indicators, particularly subclasses 200+ for a mechanical indicator used to display a parameter.

**910 PORTABLE EXERCISE DEVICE WITH CARRYING HANDLE, CASE, OR CABINET:**

A collection of art comprising documents relating to transportable exercise apparatus having either manually graspable toting means or a container or chest for storage during conveyance.

END