PORTABLE, MECHANICAL LASSO TRAINING APPARATUS

Inventor: Kenneth J. McCord, R.F.D. No. 1, Gretna, Nebr. 68028

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ABSTRACT

A portable, mechanical apparatus which simulates a running calf for roping purposes and comprises an electrical motor driven winch, having a cable connected to a target sled, the target having a calf-like superstructure, ground engaging elements, and a guidance and release system wherein, upon being towed by the winch, the target will follow a straight, curved, or zig-zag path until lassoed, at which time the winch will stop and the target can be towed back to repeat the cycle.

19 Claims, 9 Drawing Figures
PORTABLE, MECHANICAL LASSO TRAINING APPARATUS

BACKGROUND OF THE INVENTION

The art of roping calves from a mounted horse is no longer a necessity for the cattle ranger. However, it has become a major part of the rodeo tradition and remains as a part of a horseman's life, whether for sport, competition, enjoyment, status, or professional reasons.

The achievement of any excellence in the art requires a great deal of training both for the horse and the rider/roper, the best training being that of the repetitive performance of chasing and roping a running calf. Preliminary requirements include the rounding up of a number of calves, providing a holding pen to maintain them in a ready position, driving them singly into a starting chute and providing an arena boundary fence to restrict them to a small area upon their release.

When the practice is to be continued for any length of time, it is necessary that either a large number of calves are on hand or that they be continually returned to the holding pen for recycling, the latter practice necessitating a rounding up and driving back, and eventually the tiring out of the calves. Furthermore, the calves' movements cannot be predicted or substantially controlled, thereby making it difficult to concentrate on troublesome points when training inexperienced horses or ropers.

The expense of maintaining a number of roping calves may be prohibitive when one considers the feed and care required, possible injury or death, corral or pasture space, and the zoning or pollution problems encountered.

Mechanical calves have thus been devised for use in roping maneuvers, the general principle being that of mechanically moving a calf-like target along a track or guide device, the guide device being of a permanent nature and not easily transportable from one location to another. In addition, such devices involve a substantial expense and have no provision for varying the movement path of the target.

SUMMARY OF THE INVENTION

This invention relates generally to a training apparatus and more particularly to a portable, mechanical apparatus which simulates a running calf and provides a target to be pursued and lassoed by a mounted roper.

The invention employs a target having a superstructure resembling a calf and a base having ground engaging elements, which is towed by a cable with an electronically controlled powered winch, from an initial starting position to a position where it is lassoed by a pursuing rider. At the point of being lassoed, a release device integral with the target disengages the cable and the lack of load on the winch causes it to cease operation. Upon reengaging the cable to the target, the target can be towed back to the starting position, with the entire operation being accomplished by one person, the roper. If the roper misses the target, the target will continue to a point near the winch and automatically stop. No arena construction is required, but only an open, flat ground surface over which the target may slidably move, and the process may be consistently repeated for as long as desired without concern for the durability of the target.

It is therefore an object of this invention to provide an improved apparatus for use in training for the art of calf roping.

Another object of this invention is the provision for a mechanical lasso training apparatus which is portable in nature and requires no corrals or fences for its effective use.

Yet another object of this invention is the provision for a lasso training apparatus which includes a movable calf-like target having a projection thereon resembling a calf's neck over which a lasso loop may be thrown.

A further object of this invention is the provision in a lasso training apparatus for a calf-like target having ground engaging elements, to be towed by a cable secured to a powered winch.

Still another object of this invention is the provision in a lasso training apparatus having a movable target, for the selection of optional movement paths to be made by the target.

A still further object of this invention is the provision in the movable target of a lasso training apparatus for a release mechanism which frees the target from its propelling unit when the target is lassoed.

Yet another object of this invention is the provision in a lasso training target having optional paths of movement, for an electric motor driven guidance system, or optionally a ground driven guidance mechanism, the system being automatically actuated when the target commences to be towed.

A further object of this invention is the provision in a lasso training target having a release mechanism interconnecting the target to a propelling unit, for an activating device which allows the release mechanism to free the target from the unit only after a lasso loop is tightened on the target neck.

Still another object of the invention is the provision in the movable target of a lasso training apparatus for a bumper device adapted to automatically shut down a towing mechanism upon making forcible contact with a foreign body.

Yet another object of this invention is the provision for a lasso training apparatus which can be operated entirely by one person, and which can be made to simulate the actions of a running calf for an indefinite number of repetitive runs.

Another object of this invention is the provision for a mechanical lasso training apparatus which is economical to manufacture, highly durable, functional, and economical in use.

These objects and other features and advantages become more readily apparent upon reference to the following description when taken in conjunction with the appended drawings.

In the drawings as hereinafter described, a preferred embodiment is depicted; however, various other modifications and alternate constructions can be made thereto without departing from the true spirit and scope of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the mechanical lasso training apparatus showing various optional paths of target movement.

FIG. 2 is a side elevational view of the target element of the invention.
FIG. 3 is a bottom view thereof showing the associated base means.

FIG. 4 is a sectional view of the guidance and release portions of the target as seen along line 4-4 in FIG. 3.

FIG. 5 is an enlarged side elevational view of the release portion of the target and its activating device as it is connected to the target projection.

FIG. 6 is a fragmentary side elevational view showing the pulling bracket and release mechanism and a schematic of its associated electrical circuit.

FIG. 7 is a bottom view of the target element of this invention showing a modified embodiment of the steering mechanism.

FIG. 8 is a fragmentary side elevational view thereof with parts omitted to avoid confusion.

FIG. 9 is an enlarged fragmentary top plan view of the steering mechanism.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings and in particular to FIG. 1, the invention is indicated generally at 10 as it would be used on a substantially flat ground surface 11 by a horse-mounted rider 12 using a standard lariat 13. The apparatus is designed to be portable in nature and comprises in combination a sled-like target 14 resembling a calf, a standard cable 16 secured at one end to the target 14, and a powered winch 17 or the like windably secured to the other end of the cable 16. The winch 17 is operably connected to a power source 18 by an electrical cord 19. A knob 20 (FIG. 2) is provided on the cable 16 proximate the one end to activate a terminal switch later to be described.

Directing attention now to the target element 14 of the invention 10, the basic structure is shown in FIGS. 2 and 3 and comprises a superstructure 22 having a calf-like appearance, an integrally connected base 23 slidably engaged with the ground surface 11, a release mechanism 24, and an electrically driven guidance mechanism 26. The molded superstructure 22 (FIG. 2) is constructed of a lightweight, durable, fiber glass material or the like which is formed to the general outline shape of an ordinary calf and has forward and rearward pairs of legs 29 and 31 respectively extending downwardly to connect to the base 23.

The forwardly projecting head and neck portion 32 has a hook 33 integrally secured to its upper surface which hook is adapted to have a loop secured thereover and a forward pull exerted thereon. The hook 33 facilitates resumed resistance to the pull of the horse while necessitating only a single dismounting by the rider for one complete cycle of operation. An elongated barb 35 extends outwardly from either side of the superstructure and is adapted to engage the ground when the target is tipped on its side, thus causing additional "pull" on the horse to simulate a "heavy" calf.

The base 23 comprises a pair of spaced, parallel runners 36 and 37 (FIGS. 2 and 3) secured at their rear ends to the rear legs 31 and extending forwardly, substantially horizontally, beyond the forward legs 29, curving upwardly in a sled-like manner and having their forward ends 38 and 39 connected to oblique supports 41 and 42 extending upwardly and rearwardly to connect to the forward legs 29, which legs extend downwardly to interconnect with the runners 36 and 37.

Interconnecting the forward ends 38 and 39 (FIGS. 2 and 3) is a transverse, arcuate-shaped horizontal bar 43 having spaced holes 45 formed therein and adaptable to removably receive a pin 55 (FIG. 3) and disposed rearwardly near the rear portions of runners 36 and 37 is an inverted U-shaped support bar 44 (FIGS. 2 and 3) secured at its ends to the runners 36 and 37 and extending upwardly therefrom.

The guidance mechanism 26 and the release mechanism 24 employ the use of a common member, a pivot rod 46 which is pivotally secured intermediate its ends on a vertical axis 47 extending through the U-shaped support bar approximately intermediate its ends. The pivot rod 46 (FIGS. 3 and 4) is an elongate member, the forward portion 48 of which is threaded and the rearward portion 49, immediately rearward of the vertical axis 47, of which is rectangular in cross section. On the forward end of the pivot rod 46 is secured a forked bracket 51 (FIGS. 3 and 4) straddling the arcuate horizontal bar 43, and adapted to slidably move across the length of the bar 43, thus moving the rear end of the rod 46 through an arc as the rod 46 pivots about the vertical axis 47. Integrally secured to the upper side of the forked bracket member 51 is an eyelet 52 (FIGS. 2 and 4) having its axis in line with the rod 46, the eyelet 52 being adapted to slidably receive the towing cable 16 which is secured rearwardly of the eyelet 52 and which extends forwardly to the winch 17.

Slidably mounted on the rod 46, forward of the vertical axis 47 is a first sleeve member 53 (FIGS. 4 and 5) the member adapted to slide forwardly from a locked position (a) (FIG. 4) to a release position (b). A weld spot 54 is secured to the periphery of the rod 46 between the axis 47 and the first sleeve 53 which prevents the sleeve from sliding rearwardly beyond the locked position (a). Biasing the first sleeve 53 rearwardly is a coil spring 56 slidably disposed on the rod 46 and adjustably secured by a nut 57 threadably disposed on the rod 46, thereby providing a means for adjusting the tension on the sleeve member against the first sleeve 53. Integrally secured to the upper periphery position of the first sleeve 53 is a pair of spaced, vertical bosses 58 having horizontally aligned holes 59 formed therein and adapted to receive a pin 61 therein for therethrough (FIGS. 4 and 5). Pivottly disposed on the pin 61 is one end of a locking member 62, the member having an elongate body 63 projecting rearwardly and having secured to its upper periphery intermediate its ends a hooked projection 64, extending upwardly and backwardly and adapted to receive and hold a cable loop 66 against a forward tension. A spring 67 (FIGS. 4 and 5) interconnects the elongate body 63 and the upper periphery of the first sleeve member 53, thereby biasing the locking member 62 to a substantially horizontal position.

An activating device 68 (FIG. 5) is connected to the side periphery of the first sleeve 53 and comprises a longitudinal slot 69 formed in the first sleeve 53; and engaging pin 71 secured at one end to the rod 46 and projecting outwardly through the slot 69 beyond the outer periphery of the first sleeve so as to be slidably disposed in the slot 69; an L-shaped latch 72 pivotally secured on its one end to the first sleeve 53 at a point forward of the slot 69 and having its opposite end engage the rearward side of the pin in an engaged position (c) (FIG. 5); a spring 73 interconnecting the L-shaped latch 72 and the first sleeve member 53, thereby bias-
ing the latch 72 to the engaged position (c). Secured to
the free end of the latch 72 is a trip cable 74 extending
upwardly and suspending below the head and neck pro-
jection 32 of the superstructure in a manner wherein,
when a lasso loop is placed around the projection 32,
tension is caused in the trip cable 74 which tends to lift
the L-shaped latch 72 from an engaged position (c) to a
disengaged position (d) thereby freeing the engaging
pin and allowing the first sleeve to slide forwardly rela-
tive thereto.

Also slidably disposed on the rod 46, rearwardly of
the vertical axis, is a second sleeve 76 (FIGS. 4 and 5)
which is adapted to slide from an engaging position (e)
to a disengaging position (f). A spot weld 77 of the like,
secured to the rod 46, restricts the forward movement
of the sleeve 76 to the engaging position (3), and a
biasing means hereinafter described urges the sleeve 76
into that position. Projecting forwardly from the upper
portion of the second sleeve 76 is a substantially
horizontal lip 78 which is adapted to engage the upper
side of the locking member elongate body 63 when a
tension is exerted on its hooked projection 64 by the
cable loop 66. The lip thus prevents the further pivot-
ing of the locking member until the disengaging of the
two members, which may be caused by either the first
sleeve sliding to the release position (b) or the second
sleeve sliding to the disengaging position (f). Integrally
secured to the lower periphery of the second sleeve 75
is a substantially vertical fastener 79 to which is
pivotally secured an elongate bumber rod 81, the
bumper rod 81 extending forwardly, through a collar
support 82 (FIG. 4) projecting downwardly from the
arcuate horizontal bar 43, and fastened to a bumber 83
extending transversely across the lower front of the tar-
get 14. A coil spring 84 is secured at one end to the
arcuate horizontal bar 43, and at its other end to the
bumper rod intermediate its ends, thereby biasing the
bumper rod and hence the second sleeve member for-
wardly, so that the sleeve member 76 engages the spot
weld 77. The second sleeve member 76 is caused to
move rearwardly and thus disengage the locking member
62 when a rearward force is applied to the bumber
83.

The guidance mechanism 26 is operably connected
to the rear end of the pivot rod 46 (FIGS. 3 and 4) and
comprises a lever member 86 secured on one end to
the rear end of the pivot rod 46, and on its other end to
an eccentric crank 88 rotatably secured to a D-C elec-
tric motor 89. A battery 91 is electrically connected
through a standard electrical switch 92 to the electric
motor 89 to provide operational power therefor. A sup-
port plate 93 provides a vertical support for the motor
89. In the guidance system operation, when the switch
92 is closed and the electrical circuit is completed, the
motor 89 rotates the eccentric crank 88, thus causing a
cracking motion of the member 86 and thereby moving
the rear end of the pivot rod 46 about an arc having its
center at the vertical axis 47. The forward end of the
pivot rod 46 and hence the eyelet 52, is thus caused to
move back and forth on the horizontal bar 43. The
cable 16, passing through the eyelet 52, is therefore
shifted from side to side relative to the target 14 and
the resultant force, which includes the force on the run-
ers 36 and 37, will cause the target to move in a zig-
zag pattern across the ground surface 11. The switch 92
may be left open to eliminate the motor's actions, and
the eyelet 52 placed in any desired position on the
horizontal bar 43 and secured thereto by selecting the
appropriate hole 45 and passing the pin 55 therethrough.
The resultant force will then be substan-
tially constant and the target may be made to go
straight, swerve to the right, or swerve to the left, de-
pending on the hole 45 chosen by the operator.

When it is desired to employ the motor 89, the cir-

cuity is designed wherein the motor will only operate
during the actual run of the target, thus eliminating the
constant use of the battery 91 and obviating the need to
continuously open and close the switch 92. The cir-
cuity as shown in schematic in FIG. 6 includes two
switching points, one at the release mechanism and
another at the towing bracket 94. Before a tension is
put into the towing cable loop 66, the elongate body 63
of the locking member 62 is biased in a position (g)
(FIG. 6) by the spring 67 thus leaving the circuit open.
When the winch 17 puts tension on the hooked projec-
tion 64, the elongate body 63 is pivoted to a position (h)
wherein the circuit is completed so as to allow the
motor to operate. The bracket 94 is pivotally secured
to one of the rear legs 31 by a normally projecting boss
96 and is biased in a position (j) (FIG. 6), by a spring
95, wherein an integrally secured contact 97 is engaged
with an insulated contact 98, thereby completing the
circuit and allowing the motor 89 to operate. The insu-
lator 99 prevents the circuit from shorting; however,
when the lariat 13 is engaged with the bracket hook
101 and pressure is exerted rearwardly, the release
device contact is maintained since a tension remains,
but the towing bracket is moved to a second position
(k) wherein the contacts 97 and 98 are separating thus
opening the circuit and rendering the motor inopera-
tive.

In operation, the target 14 is placed in a ready posi-
tion as shown in FIG. 1, with the locking member in the
locked position, the cable loop passing through the
eyelet 52 and secured to the hooked projection, and
the winch secured to the power source 18 and
mechanically secured to the towing cable 16. The
desired x, y, z (FIG. 1) or straight ahead path of motion
is chosen and the appropriate setting of the pivot rod
46 is made. The operator then causes the winch to
move by an electronic triggering mechanism which
may or may not include a provision for delay. The
winch operation may of course be manually stopped
and started by a second person. The target is moved
across the ground surface 11 until the roper 12 lassoes
the target projection 32 or until the target reaches the
end of its run. Upon being lassoed, the trip cable is
tightened and the activating device allows the first
sleeve 53 to move forward under the tension of the tow
cable 16. When it reaches the release position (b)
(FIG. 4), the locking member pivots upwardly, disen-
gaging from the lip 78 and allowing the cable loop 66 to
slip off the hooked projection 64. At this point, the re-
sistance to the pull of the cable is reduced appreciably
and a governor operatively connected to the winch
motor causes the winch 17 to cease operation. The
roper then dismounts, removes the lariat 13 from the
neck projection 32, secures the lariat 13 over the hook
33 to allow the horse to work or to maintain the rope in
a taut position, returns the cable loop 66 to the looked
projection 64, relocks the release mechanism 24 and
the activating device 68, and remounts the horse. After
slipping the lariat off the hook 33, he engages the tow-
ing bracket with his lariat 13 and tows the target back
to the initial position from where the process may be
repeated. In the event the target 14 is not lassoed, it will
be towed toward the winch 17 until the knob 20
reaches a terminal switch on the winch. This switch is
electrically connected in a pulse circuitry and is
adapted to close and open upon the knob's passing
through, thereby shutting down the operation of the
winch and allowing the target to be towed back to
repeat the cycle.

Directing attention to the modified embodiment of
the guidance mechanism (FIGS. 7, 8 and 9), the elec-
tric motor 89 is eliminated and a ground driven chain
application is utilized. A pair of ground engaging
wheels 102 and 103 are mounted on an axle 104 which
is supported at its ends by bearing plates 106, in-
dividually secured to the runners 36 and 37 proximate
the forward legs 29. The wheels 102 and 103 have
toothed circumferences 107 and are axially disposed so
as to engage the ground surface and are thereby caused
to rotate as the target 14 is propelled across the arena
surface 11. Rigidly mounted on the axle 104, inter-
mediate the wheels 102 and 103, is a drive sprocket
108 longitudinally aligned with a second sprocket 109
and having a chain 111 operably connecting the two.
The second sprocket 109 is secured to the U-shaped
support bar 44 by a vertical riser 112 and has integrally
secured on its axis a worm gear 13. Horizontally
mounted on the support plate 93 and operably engag-
ing the worm gear with its circumference is a power
gear 114, the gear having a crank 88' rigidly secured
along its radius. On the outer end of the crank 88' is
formed a post 116 which extends through a longitudi-
 nal slot 117 formed in the lever member 86'. The
post 116 is adapted to slide along the length of the slot
117, which slot is substantially twice the length of the
 crank 88'. The other end of the lever member 86 is
secured to the rear end of the pivot rod 46 and acts to
cause a reciprocating motion in a similar manner as
that described in the preferred embodiment. However,
the slot 117 which is provided in the lever member 86'
of the modified embodiment, causes an erratic move-
ment of the lever member 86 and therefore the move-
ment of the target tends to more closely resemble the
movements of a live calf. The construction of the
original embodiment's guidance device causes the tar-
get to follow a sinusoidal path, whereas that of the
modified embodiment causes a more abrupt change of
direction and more of a straight line of movement in
each direction traveled.

In view of the above description, it is also possible
to provide the target with variable speed control, thus
permitting the target to randomly speed up and slow down.
Further, by controlling the speed, lesser skilled hor-
semen can acquire valuable experience in learning the
rudiments of proper roping procedures.

I claim:
1. A portable mechanical lasso training apparatus
adapted to be propelled on a substantially horizontal
arena surface and comprising:

a movable target simulating in shape a known roping
target, said target having a projection thereon
adaptable to receive the loop of a standard lasso;

propelling means including power means spaced
from said target for moving said target at a
predetermined speed from an initial position to a
catch position on the arena surface;

base means secured to said target and adapted to en-
gage the arena surface;

guidance means mechanically secured to said base
means and adapted to control the direction of
movement of said target along a predetermined
path relative to the arena surface;

release means interconnecting said base means to
said propelling means;

wherein, when a lasso engages said target projection
and thereby tends to retard its propelled motion,
said release means disengages said propelling
means from said base means.

2. A portable mechanical lasso training apparatus as
defined in claim 1 wherein said base means comprises
at least a pair of ground engaging means adapted to en-
gage the arena surface.

3. A portable mechanical lasso training apparatus as
defined in claim 2 wherein said propelling means com-
presents a cable secured at one end to said target and at
its other end to a first power means, said power means
capable of towing said target from said initial position
to said catch position.

4. A portable mechanical lasso training apparatus as
defined in claim 3 wherein said guidance means com-
presents:

a transverse crossbar secured at its ends to said run-
ners near the forward ends thereof and extending
therebetween;

a securing means adaptably disposed on said trans-
verse crossbar, said securing means connected to
said cable and adoptable to be moved on said
crossbar to any position between a first position
near said right runner to a second position near
said left runner; thereby changing the resultant
force on said target while being towed and thus ef-
flecting a change in the direction of movement of
said target.

5. A portable mechanical lasso training apparatus as
defined in claim 4 wherein said securing means com-
presents an elongate horizontal rod member extending
substantially longitudinally along the length of said
base means;

a fixed vertically disposed fulcrum, pivotally engag-
ing said rod member at a point intermediate the
ends of said rod member;

crank means interconnecting the rearward end of
said rod member with a rotatable shaft;

second power means for rotating said shaft; a bracket
secured to the forward end of said bar member and
slidably engaging said crossmember;

wherein rotation of said shaft causes said bracket to
oscillate on said crossmember between said first
and said second position.

6. A portable mechanical lasso training apparatus as
defined in claim 5 wherein said release means com-
presents:

a first sleeve slidably disposed on said rod member,
said sleeve biased rearwardly to a locked position
and movable forwardly to a release position;

a second sleeve disposed rearwardly of said first
sleeve on said rod member and having on the
upper surface thereof a forwardly projecting lip
adapted to slidably receive thereunder a substantially horizontally disposed member; a locking member having its one end pivotally secured on a transverse axis to the upper surface of said first sleeve and its other end adaptable to slidably engage said second sleeve projecting lip, said locking member having secured thereon intermediate its ends, a hooked projection for securing said cable thereto, said hooked projection adaptable to release said cable when said locking member moves to a release position; an eyelet secured near the forward end of said rod member, said eyelet having said cable slidably extending therethrough; wherein, when the motion of the propelled target is suddenly retarded, the cable causes said first sleeve to slide forwardly to the release position, thereby allowing said locking member to disengage from said projecting lip and thus allow the cable to be released from said hooked projection.

7. A portable mechanical lasso training apparatus as defined in claim 6 and including a switch means wherein when said cable is released from said hooked projection, the decrease in resistance and corresponding decrease in propelling load will cause said propelling means to cease operation.

8. A portable mechanical lasso training apparatus as defined in claim 6 and including biasing means urging said one end of the locking member downward to avoid direct contact with said lip until a minimal pressure is exerted on said hook by said cable, at which time said locking member contacts said lip thereby completing an electric circuit which causes said second power means to operate until the contact is no longer made.

9. A portable mechanical lasso training apparatus as defined in claim 6 and including an activating device, said device comprising: a longitudinal slot in said first sleeve; a pin radially secured to said rod member and extending outwardly through said slot beyond the outer periphery of said first sleeve; an L-shaped latch pivotally secured on said one end to said collar at a point forward of said slot, and having its opposite side engage said pin, being held in such engaged position by a biasing means; and an activating, flexible linkage secured at its one end to said latch and at its other end to said target projection; wherein, when the lariat engages said projection, a tension is produced in said linkage thereby causing said latch to pivot and disengage said pin, thus permitting said first sleeve to slide forward on said rod member.

10. A portable mechanical lasso training apparatus as defined in claim 6 wherein said second sleeve is slidably disposed on said rod member and is biased forwardly to an engaging position and movable rearwardly to a disengaging position, said second sleeve having secured thereto one end of an elongate bumper extension, said extension projecting forwardly through a slidable support beyond said transverse bar and having a bumper secured thereto at its other end; wherein when a minimal pressure is exerted rearwardly on said bumper, said second sleeve is caused to slide rearwardly to the disengage position thereby releasing said locking member from its engagement with said projecting lip.

11. A portable mechanical lasso training apparatus as defined in claim 8 and including a pulling bracket secured to the rear portion of said target, said bracket adaptable to have a lariat secured thereto for returning said target to the initial position wherein, when a minimal pressure is exerted on said bracket in the rearward direction, a pair of contacts are separated thereby opening the electric circuit in which said second power means is electrically connected.

12. A portable mechanical lasso training apparatus as defined in claim 6 wherein said first power means comprises a portable winch driven by an electric motor adapted to be controlled by an electrical switch means.

13. A portable mechanical lasso training apparatus as defined in claim 3 wherein said first power means comprises a governor principle adapted to stop the operation of said propelling means upon a sudden decrease in load, such as would occur when said cable is released from said locking member.

14. A portable mechanical lasso training apparatus as defined in claim 6 wherein said governor is also adapted to stop the operation of said propelling means upon a sudden increase in load.

15. A portable mechanical lasso training apparatus as defined in claim 16 wherein said governor is also adapted to stop the operation of said propelling means upon a sudden increase in load.

16. A portable mechanical lasso training apparatus as defined in claim 3 and including a terminal switch electrically connected to said propelling means and adapted to open upon said target's reaching a predetermined position relative to said propelling means thus stopping the movement of said target.

17. A portable mechanical lasso training apparatus as defined in claim 5 wherein said second power means comprises at least one axially mounted wheel adapted to engage the ground surface and thereby be caused to rotate as said target is propelled along the ground surface; and linkage means operably connecting said wheel to said rotatably shaft.

18. A portable mechanical lasso training apparatus as defined in claim 17 wherein said linkage means comprises: a sprocket rigidly mounted on the axle of said at least one axially mounted wheel; an oppositely disposed sprocket operably connected thereto by a chain; a worm gear extending outwardly and integrally from the axis of said oppositely disposed sprocket; a gear operably engaged at its circumference with said worm gear and having said rotatable shaft as its axis.

19. A portable mechanical lasso training apparatus as defined in claim 5 wherein said crank means comprises a torque arm secured at one end to said rotatable shaft and having on its other end a post extending substantially normally therefrom; and an elongate lever member pivotally secured at its one end to the rearward end of said rod member and having near its other end an elongate longitudinal slot in which said post is slidably disposed; wherein rotation of said rotatable shaft causes an erratic oscillation of the rearward end of said rod member and thus causes said target to follow an erratic path.

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