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Willcox

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[54] **GOLF BALL PRACTICE DRIVING APPARATUS**

[76] Inventor: **Leland J. Willcox,** Cambridge, Iowa 50046

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[21] Appl. No.: **175,271**

[52] **U.S. Cl.** ..... **273/201,** 273/181 J, 273/182 R, 273/184 R

[51] **Int. Cl.** **A63b 57/00**

[58] **Field of Search** ..... 273/201, 11 C

[56] **References Cited**

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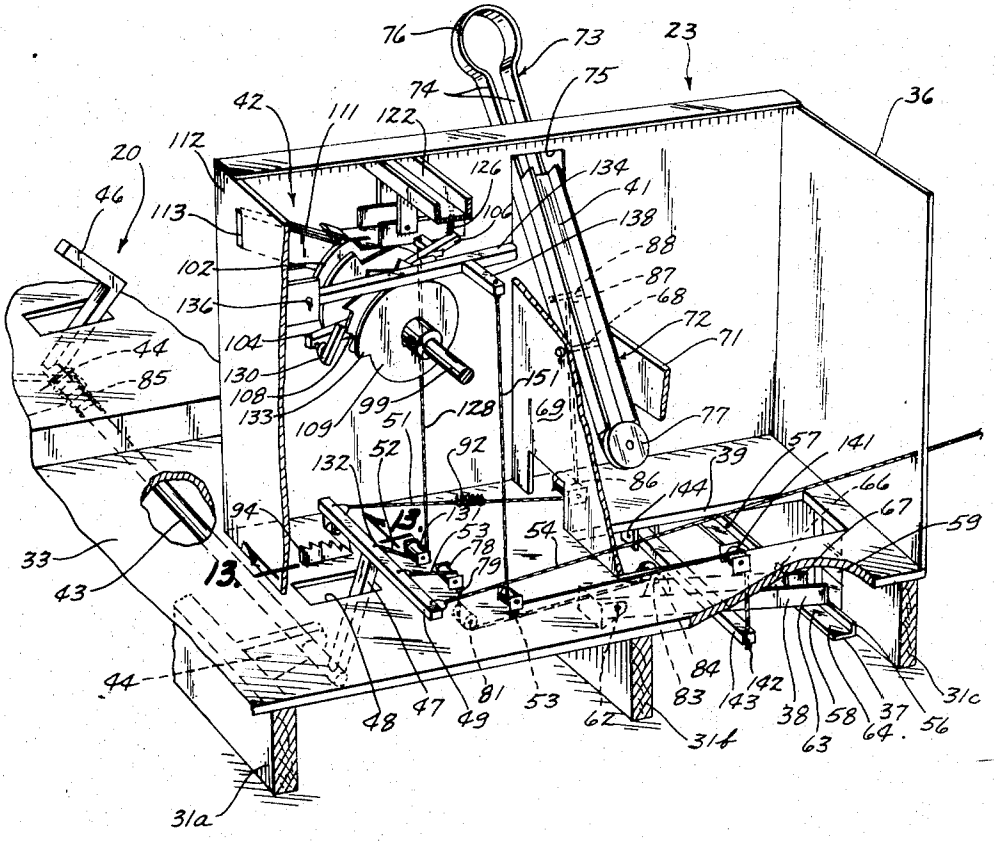
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Assistant Examiner—Harry G. Strappello
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[57] **ABSTRACT**

The apparatus has a ground support platform with an upright tee member accessible to a golfer standing on one end of the platform. The other end of the platfrom carries a ball receiving and delivering mechanism that includes an up and down pivoted ball guiding arm. In response to a single actuation of a foot operated member at the golfer's end of the platform, a single ball is released from a container and supplied to the guide arm which directs the released ball downwardly onto the tee member. On release of the foot operated member the guide arm is movable upwardly away from the tee member to permit full accessibility to the tee ball for driving purposes. A coin operated mechanism presets the number of balls to be driven during one driving round, and after such preset number of balls has been driven, the apparatus is rendered inoperative regardless of any later actuation of the foot operated member. A yardage indicating device may be associated with the apparatus for simulating competitive playing for confined or limited areas such hotel and motel grounds, or indoor recreational rooms and the like.

5 Claims, 18 Drawing Figures



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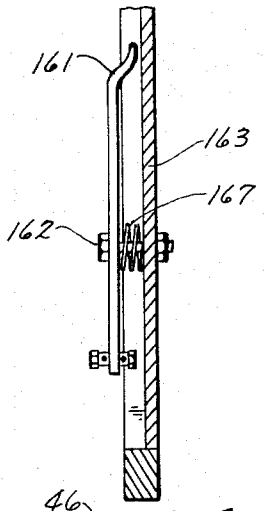


Fig. 2

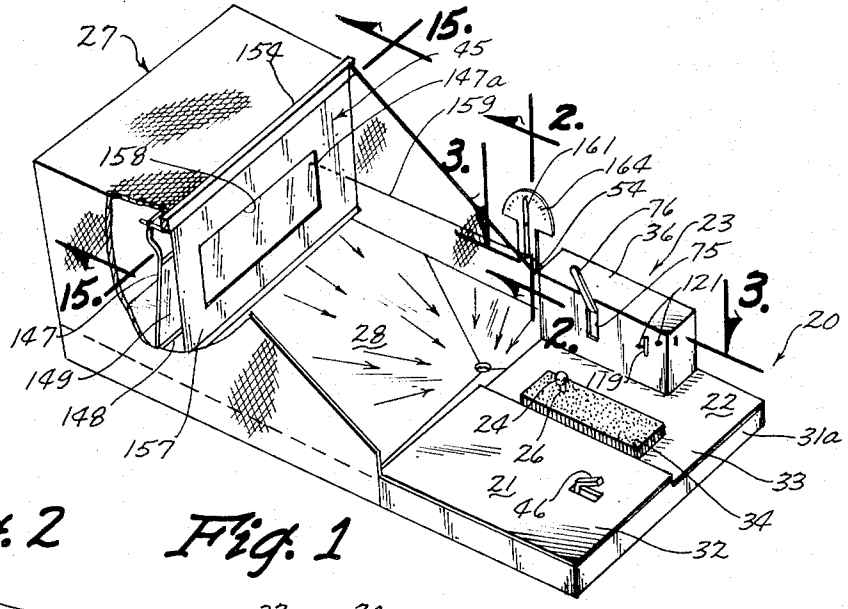


Fig. 1

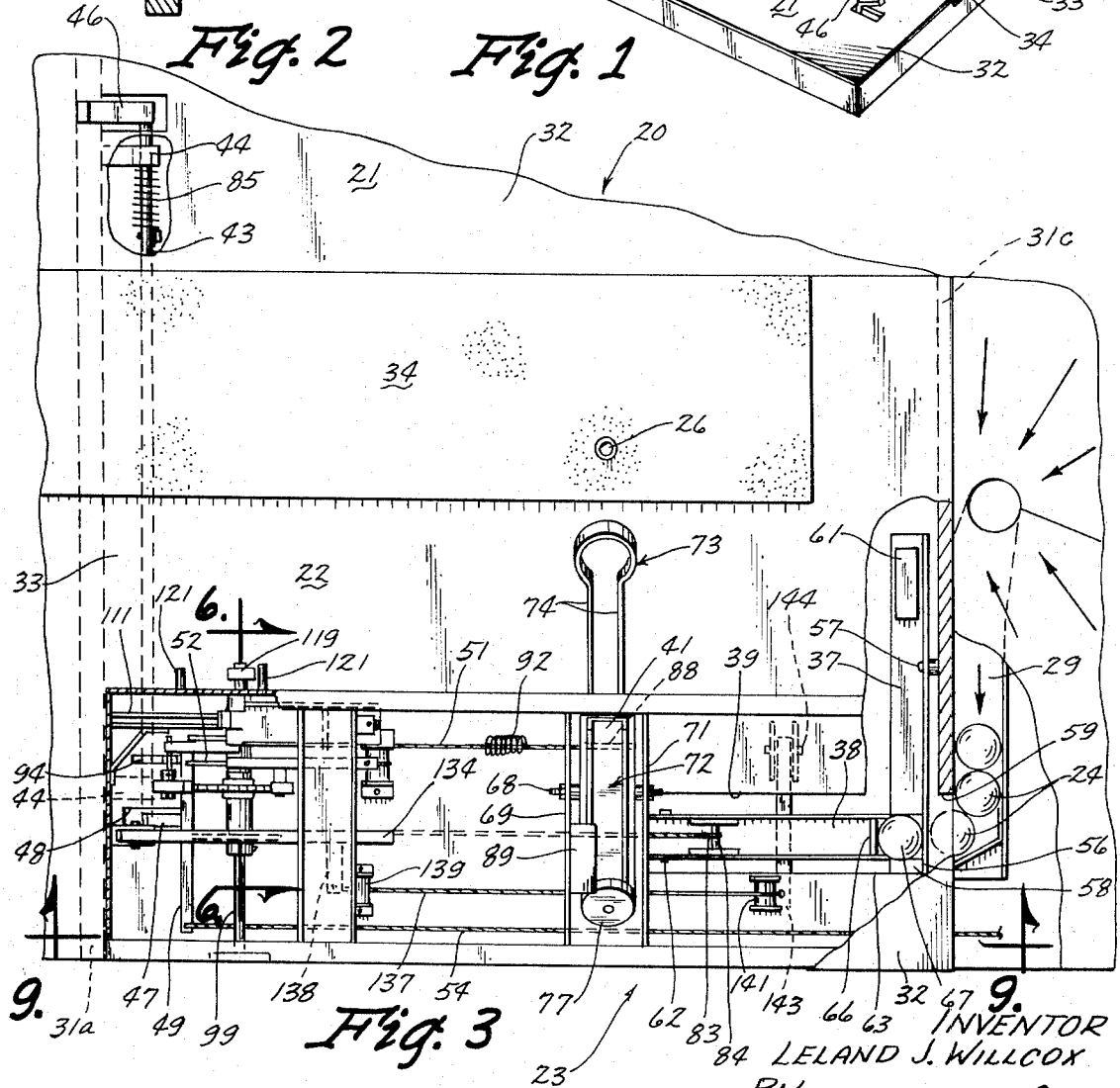


Fig. 3

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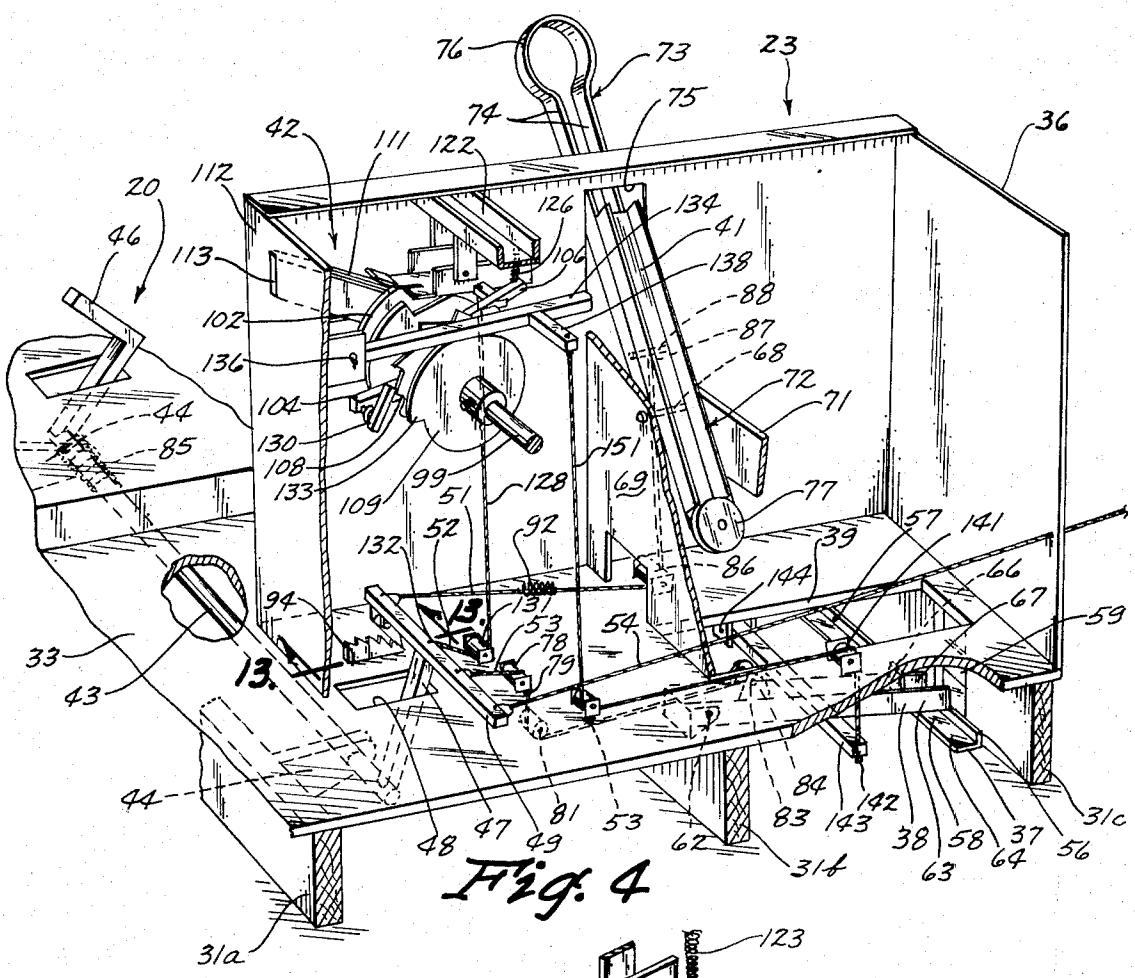


Fig. 4

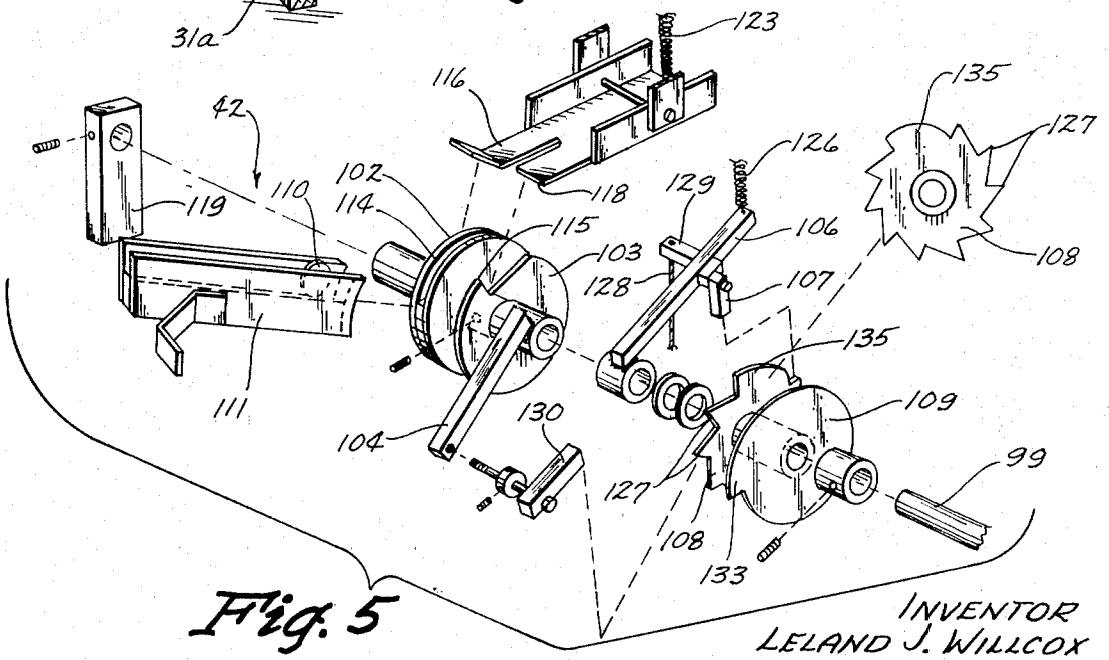


Fig. 5

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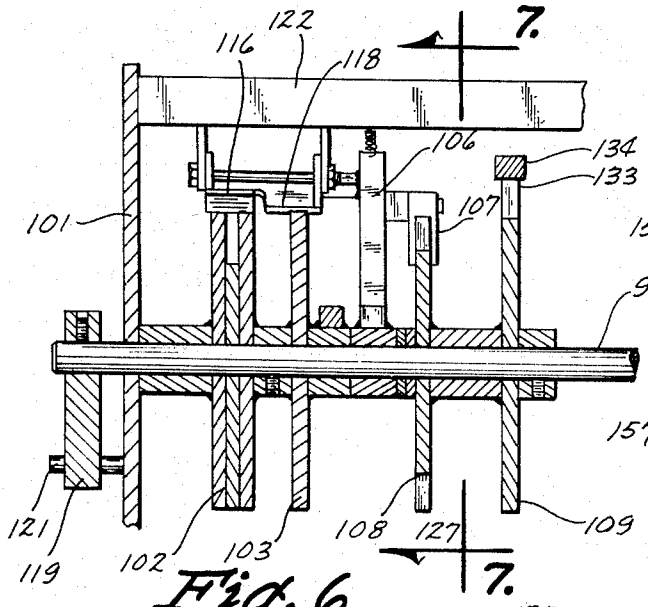


Fig. 6

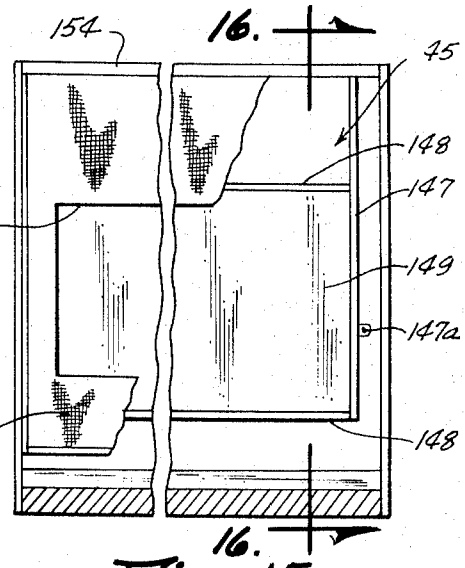


Fig. 15

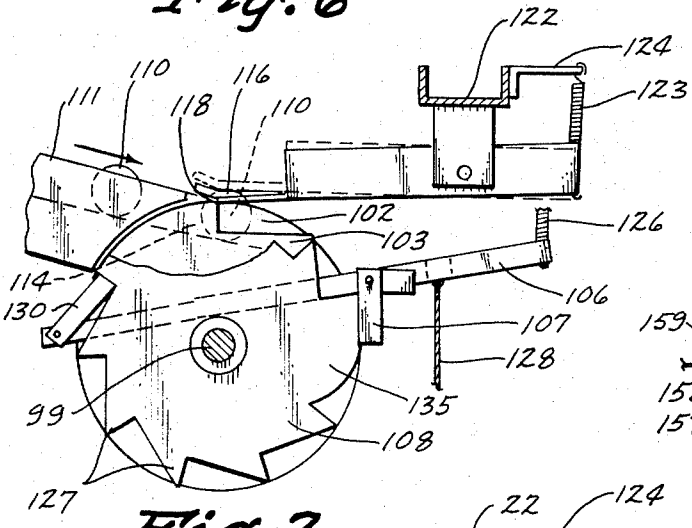


Fig. 7

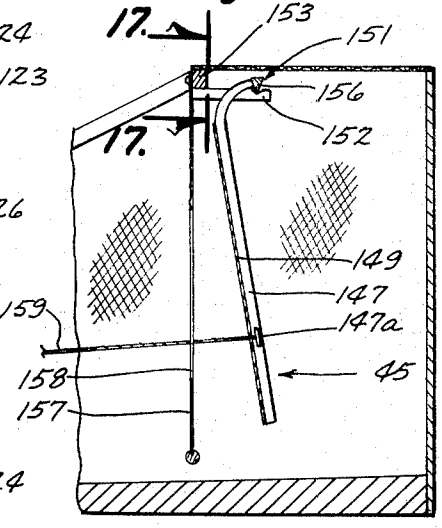


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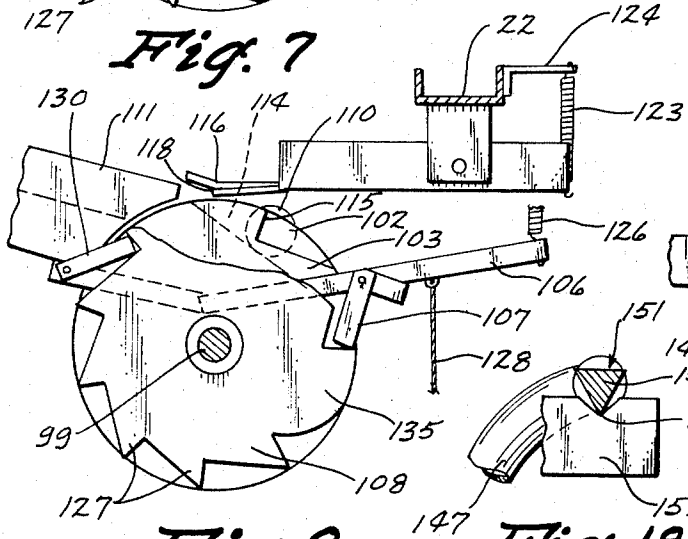


Fig. 8

Fig. 18

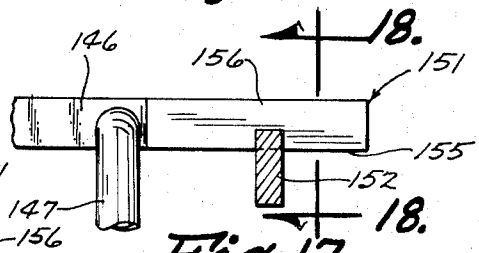


Fig. 17

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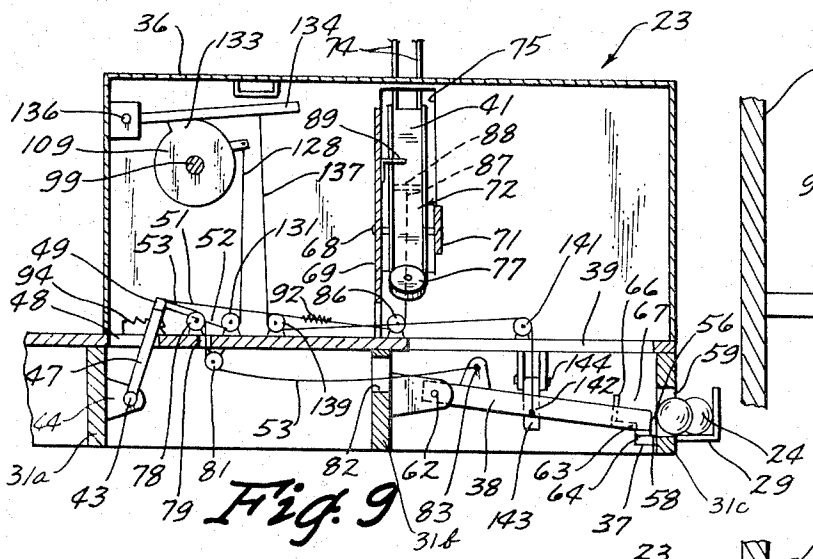


Fig. 9

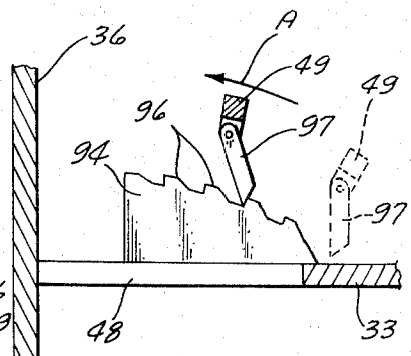


Fig. 13

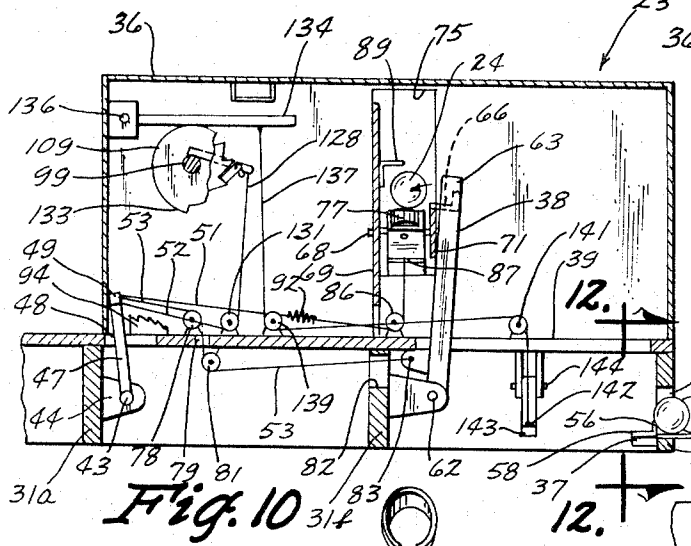


Fig. 10

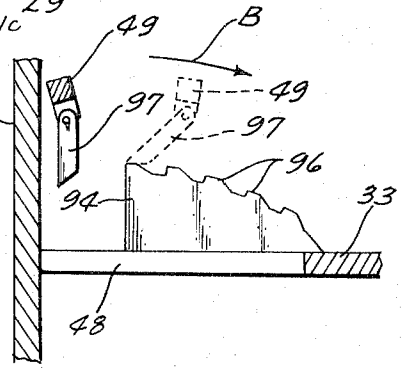


Fig. 14

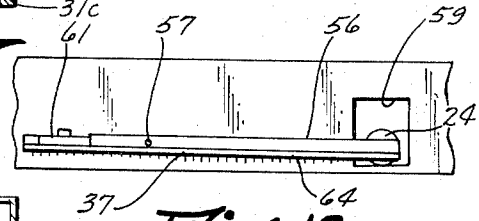


Fig. 12

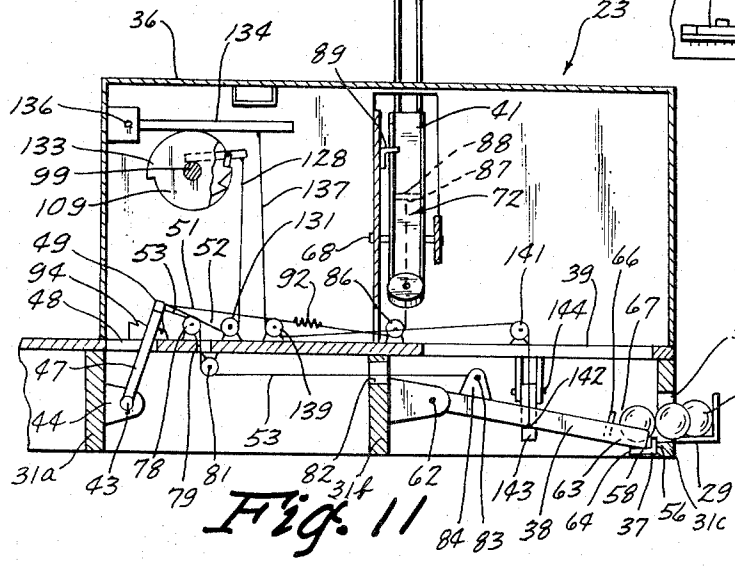


Fig. 11

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GOLF BALL PRACTICE DRIVING APPARATUS

SUMMARY OF THE INVENTION

The apparatus is of a simple and sturdy construction and comprised of parts capable of withstanding hard usage over a long service life with a minimum of maintenance attention. If repairs are required, such can be made by relatively unskilled persons with the use of readily available tools and parts. The apparatus is easily operated to efficiently release golf balls successively from a supply source, and to set each released ball on a tee member without necessitating any bending over or walking about by the golfer. A coin controlled mechanism presets the number of balls to be driven. The balls may be driven into a net for automatic return to a supply source so that the apparatus is continuously reloaded for play. To simulate a playing atmosphere in the use of the apparatus a movable target placed in the net, on being struck by a ball, operates a yardage indicator, with the yardage varying in accordance with the movement of the target when hit by a driven ball.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the golf ball driving apparatus of this invention shown in assembly relation with a net structure for receiving a driven ball;

FIG. 2 is an enlarged detail sectional view taken along the line 2 — 2 in FIG. 1;

FIG. 3 is an enlarged plan sectional view as seen on line 3 — 3 in FIG. 1;

FIG. 4 is a rear perspective view of the apparatus shown in FIG. 3;

FIG. 5 is an exploded perspective view of a coin operated ratchet and cam mechanism for presetting the number of balls to be delivered during one round of practice driving;

FIG. 6 is an enlarged sectional view taken on the line 6 — 6 in FIG. 3;

FIG. 7 is a sectional view seen along the line 7 — 7 in FIG. 6;

FIG. 8 is illustrated similarly to FIG. 7 showing the parts thereof in changed positions;

FIG. 9 is a reduced sectional view taken along the line 9 — 9 in FIG. 3 showing a ball in a supported position on an elevating arm;

FIG. 10 is illustrated similarly to FIG. 9 and shows a ball being transferred from the elevating arm to a track or guide arm;

FIG. 11 is illustrated similarly to FIG. 9 and shows a ball being released from a discharge chute on to the elevating arm;

FIG. 12 is a sectional detail view taken on the line 12 — 12 in FIG. 10;

FIG. 13 is an enlarged sectional detail view as seen along line 13 — 13 in FIG. 4;

FIG. 14, illustrated similarly to FIG. 13, shows the parts thereof in changed positions;

FIG. 15 is an enlarged sectional view of the net structure taken along line 15 — 15 in FIG. 1;

FIG. 16 is a sectional view on line 16 — 16 in FIG. 15;

FIG. 17 is an enlarged sectional detail view on line 17 — 17 in FIG. 16; and

FIG. 18 is a sectional view taken along the line 18 — 18 in FIG. 17.

DETAIL DESCRIPTION OF THE INVENTION

Referring to FIG. 1 of the drawings, the apparatus of this invention is seen to include a platform or base structure **20** of a rectangular shape having an end section **21** for supporting a golfer and an opposite end section **22** for carrying a ball receiving and delivery unit, indicated as **23**, for guiding a ball **24** into a driving or teed up position on a tee member **26**. Projected laterally from one side of the platform **20** is a ball receiving net structure **27** having a converged bottom wall **28** that serves as a container for collecting and directing hit balls into a discharge chute member **29** (FIG. 3) in which the balls are arranged in a single row or file. The chute member **29** constitutes a magazine from which the collected balls may be released one at a time for delivery to the tee member **26**. Thus, it is seen that with the golfer standing on the platform section **21** a ball **24** on being driven from the tee **26** into the net structure **27** falls onto the converging floor **28** for return by gravity action to the chute member **29**.

The platform structure **20** (FIGS. **3** and **4**) may be of a wood construction comprised of longitudinally extended upright transversely spaced frame members **31***a*, **31***b* and **31***c* which are connected together by a pair of top panel sections **32** and **33** arranged at different elevations so that the panel section **32** at the golfer's section **21** is higher than the panel section **33** which supports the unit **23**. A bristle rug or brush **34** (FIG. **1**) or the like is carried on the lower panel section **33** and has projected therethrough the tee member **26**.

With reference to FIGS. **3** and **4** the ball receiving and delivery unit **23** includes a housing **36** of an inverted box shape. Located below the housing **36** and within the confines of the platform structure **20** is a pivoted arm member **37** for successively releasing the lead ones of the golf balls **24** from the discharge chute **29**. A pivoted elevating member **38** for receiving a ball released by the arm member **37** is normally located below the housing **36**, and is movable upwardly into the housing through an opening **39** in the panel member **33**. A pivoted track means or guide arm **41** within the housing **36** receives a ball **24** from the elevating arm **38** and then guides the ball to a teed up position on the tee member **26**. A coin controlled mechanism **42** also located within the housing **36** presets the number of balls **24** to be released by the arm member **37** during one round of play or driving by a golfer.

Located to the underside of the panel sections **32** and **33** (FIGS. **3** and **4**) is a foot operated rock shaft **43** which extends longitudinally of the platform **20** and is rotatably supported in bearing members **44** that are mounted on the frame member **31a**. At one end of the rock shaft **43** is a radially extended foot actuated member **46** that projects through the panel section **32** at a position conveniently accessible to a golfer without requiring his moving from a driving position on the platform **20**. The opposite end of the rock shaft **43** has a rock arm **47** projected upwardly through an opening **48** in the panel section **33** and into the housing **36**. A cross arm **49** extended axially of the rock shaft **43** is carried on the free end of the rock arm **47** for movement transversely of the platform **20** in response to each foot operation of the rock shaft **43**. Spaced longitudinally of and secured to the cross arm **49** is a series of four connecting cables **51**, **52**, **53** and **54** corresponding, respectively, to the track means **41**, coin controlled

mechanism **42**, the ball elevating arm **38** and a target assembly **45**.

The ball release arm **37** (FIGS. **3** and **4**) is formed of a length of angle iron extended longitudinally along the platform frame member **31c** with one leg **56** thereof arranged adjacent to and in a parallel relation with the frame member **31***c*. The arm **37** is pivoted at **57** (FIG. **4**) intermediate its ends for up and down movement of a gate section **58** thereof into and out of an upper or ball holding position relative to a ball entrance opening **59** formed in the frame member **31***c*.

The terminal end of the discharge chute **29** is located opposite the opening **59** to provide for a gravity feed of the lead one of the balls **24** through the opening **59** when the gate section **58** of the release arm **37** is in its lower or ball releasing position. As shown in FIG. **11** this ball releasing position is defined by the location of the leg **56** of the gate section **58** below the lower side of the ball opening **59**. The gate section (FIG. **3**) is continuously urged toward the upper or ball holding position therefor by a weight **61** carried on the ball release arm **37**.

The gate section **58** is moved to its lower or bail releasing position by the movement of the pivoted elevating arm **38** to a lower ball receiving position (FIG. **11**). The elevating arm (FIGS. **3** and **4**) is of a channel shape in transverse cross section and in its lower position extends between the platform frame members **31***b* and **31***c* in line with the ball opening **59**. With one end of the elevating arm pivoted at **62** on the frame member **31***b*, its free or opposite end **63** overlies the horizontal leg **64** of the release arm **37** at the opening **59** (FIG. **11**). The channel of the elevating arm **38** is closed at a position spaced inwardly from its free end **63** by a stop plate **66** to form a pocket or ball receiving portion **67**.

The elevating arm **38** is of a weight such that on its movement to a lower position, shown in FIG. **4**, the gate section **58** of the release arm **37** is engaged by the end **63** of the elevating arm and moved to its lower ball releasing position against the action of the weight **61**. When this occurs, the lead one of the balls **24** from the discharge chute **29** (FIG. **3**) is movable through the opening **59** and into the ball supporting portion **67** of the elevating arm **38**. The stop plate **66** retains a released ball **24** at a position such that the released ball **24** (FIG. **11**) and the next adjacent following ball are in touching engagement in substantially the plane of the vertical leg **56** of the release arm **37**. Thus, on upward movement of the free end **63** of the elevating arm **38**, the release arm **37** is concurrently movable therewith to an upper ball holding position by the weight **61**. On a continued upward movement of the elevating arm **38**, therefore, the balls in the discharge chute **29** are held against travel through the opening **59**. Upward movement of the elevating arm **38** takes place in response to a foot operation of the rock shaft **43** in a manner to be hereinafter described.

On movement of the elevating arm **38** to its upright position, shown in FIG. **10**, the golf ball **24** is transferred by what might be called a catapault action onto the track or guide arm **41**. As illustrated in FIGS. **3** and **4**, the guide arm extends longitudinally of the frame member **31***b* for pivotal up and down movement in a vertical plane normal to the vertical plane of movement of the elevating arm **38**. The guide arm is pivoted intermediate its ends at **68** for pivotal up and down movement between a pair of spaced members **69** and **71** extended transversely of the housing unit **36**. The guide arm **41** is formed with an inner section **72** of a channel shape and an outer section **73** of a loop form having flat upright leg members **74** secured to and in longitudinal alignment with corresponding channel legs of the inner section **72**. The forward or loop end **76** of the outer section **73** is of an enlarged circular shape relative to the spacing between the legs **74** and of a size to permit a guided travel of a golf ball therethrough. The outer section **73** of the guide arm **41** projects outwardly from the housing **36** through an upright opening **75** located opposite the tee member **26**. The terminal end of the inner section **72** carries a weight **77** so as to continuously urge the outer section **73** of the guide arm **41** to its upper or normal rest position defined by the engagement thereof with the upper side of the opening **75**. The lower position of the outer section **73** occurs when such section engages the lower side of the opening **75**.

In a ball teeing position the loop end **76** of the track arm **41** is arranged about and in a concentrically spaced relation with the tee member **26**. At the same time a portion of the inner channel section **72** is located adjacent to and below the ball supporting portion **67** of the elevating arm **38** when such arm is in its upright position shown in FIG. **10**, defined by engagement of the arm **38** with the transverse member **71**. When the track arm **41** and elevating arm **38** are thus relatively arranged a ball **24** is discharged from the pocket **67** of the elevating arm **38** onto the inner section **72** with the legs thereof forming guide tracks between which the ball **24** is guided downwardly onto the legs **74** of the outer track section **73**. The legs **74** then guide the ball for travel through the loop **76** to a supported position on the upper end of the tee member **26**. On movement of the track arm **41** to its rest or inoperative position of FIG. **9** the loop end **76** merely moves upwardly from the tee member **26** without interference with the teed ball **24**.

The cable **53** (FIG. **9**), for raising the elevating arm **38**, from an end secured to the cross arm **49** of the rock arm **47** is trained over a first roller **78** mounted on the top side of the platform panel **33** and then downwardly through an opening **79** in the panel **33** for travel about a lower roller **81** suspended from the under side of the panel **33**. From the lower roller **81** the cable **53** passes through an opening **82** formed in the frame member **31b** for connection of its opposite end **83** to a laterally projected connector **84** on the elevating arm **38**.

The cable **51** (FIG. **10**) for the guide arm **41** extends from the cross arm **49** for travel upwardly about a roller **86** carried on the top side of panel member **33** at a position between the transverse members **69** and **71**. The opposite end **87** of the cable **51** is attached to a connector **88** secured to the under side of the arm **41** at a position forwardly of the pivot **68** (FIG. **4**).

Thus in response to a single actuation of the foot actuator **46** the release arm **37** is permitted to be moved upwardly by the weight **61** to a ball holding position on upward movement of the elevating arm **38** from its position shown in FIG. **11** to the position thereof in FIG. **10**. Concurrently with this upward movement of the elevating arm **38**, the guide arm **41** is likewise moved from its position of FIG. **11** to its position in FIG. **10**. On engagement of the elevating arm **38** with the transverse member **71**, a released ball **24** is ejected from the pocket **67** onto the guide arm **41**. During this ejection

action the ball 24 is directed to a position on the guide arm by a hood member 89 secured to the transverse member 69.

After the ball 24 has been teed up on the member 26 the foot actuator 46 is released whereby the rock arm 47 is returned to its normal or rest position by a torsion spring 85 (FIG. 3) operatively connected to the rock shaft 43 and one of the rock shaft bearings 44. This return movement of the cross arm 49 provides for the return movement of the guide track 41 by a weight 77 thereon and the elevating arm 38 from their positions shown in FIG. 10 to the positions thereof shown in FIG. 11.

To assure the efficient function of the guide arm 41 to tee up a ball 24 on the tee 26, the relative movements of the rock arm 47 and guide arm 41 through the cable connection 51 are such that the loop 76 of the arm 41 is concentrically spaced about the tee 26 before the rock arm 47 has moved through its full actuating movement. To permit the continued movement of the rock arm 47 through a full actuating movement therefor while maintaining the guide arm 41 in its lower position against the lower side of the housing opening 75, a coil spring 92 is connected in the cable 51.

Additionally, in order to provide for thepivotal movement of the rock arm 47 through its full swing or actuating movement each time the foot actuator 46 is depressed a toothed segment 94 (FIG. 4) is secured to and projected upwardly from the panel member 33 in a plane parallel to the plane of pivotal movement of the rock arm 47 and extended transversely of the cross arm 49. Pivotally suspended from the cross arm (FIGS. 13 and 14) for operative association with the teeth 96 on the segment 94 is a pawl member 97. In a manner well known the pawl 97 (FIG. 13) is movable from a disengaged position, shown in dotted lines, into successive engagement with the teeth 96 on pivotal movement of the rock arm 47 in one direction indicated by the arrow A. When the pawl 97 reaches its full line position, shown in FIG. 14, it is movable in the direction of the arrow B over the teeth 96, as shown in dotted lines, for return to its dotted line position shown in FIG. 13. As a result the rock arm 47 cannot be partially moved over its operating range and must be moved through a complete cycle on each actuation of the foot member 46 before the guide arm 41 is permitted to move away from a guided relation with a ball 24 on the tee member 26.

As thus far described it is seen that so long as golf balls are supplied to the discharge chute 29 a ball 24 will be positioned on the tee member 26 in response to each actuation of the foot member 46. To limit or control the number of balls to be played by a golfer during one round of play or driving practice, there is provided the coin mechanism 42 for rendering the elevating arm 38 inoperative to move the release arm 37 out of a ball holding position. The mechanism 42 (FIGS. 4 and 5) include a shaft 99 extended transversely of and supported in the side walls of the housing unit 36. Mounted in a stacked relation on the shaft 99 (FIG. 6) and in order from the front side wall 101 of the housing is a coin wheel 102, a release cam 103, a pawl support 104, a support 106 for a working pawl 107, a ratchet 108 and a holding cam 109.

The coin wheel 102 is adapted to receive a coin indicated at 110 from a coin chute 111 (FIGS. 4 and 5) secured to the housing wall 112 which is formed with a coin receiving opening 113. When the coin 110 (FIGS. 5 and 7) is deposited in a coin slot 114 formed in the periphery of the coin wheel 102, rotation of the wheel moves the coin into engagement with a pivoted latch member 116 to provide for the movement of a latch abutment 118 out of engagement with a stop shoulder 115 on the release cam 103. Release of the cam 103 provides for a rotation of the shaft 99 through an angular distance defined by the movement of a hand knob 119 (FIGS. 1 and 3) between stop members 121. This limited rotation of the shaft 99 provides for a corresponding rotational movement of the ratchet 108 and holding cam 109. It is to be understood that during this partial rotation of the shaft 99, as defined by the stop members 121, the coin wheel 102, release cam 103, ratchet 108 and holding cam 109 are all rotatable as a unit with the shaft, with the hub portions corresponding to the pawl supports 104 and 106 being rotatable relative to the shaft 99.

The latch member 116 is pivotally suspended from a transverse member 122 connected to and extended between the housing side walls. The latch abutment 118 and a coin engaging finger 117 are continuously biased into engagement with the release cam 103 and the coin wheel 102 respectively, by a coil spring 123 (FIG. 7) connected to one end of the latch member 116 and to a connector 124 extended laterally from the transverse member 122.

The pawl support 106 for the working pawl 107 is continuously biased in an upward direction by a coil spring 126 connected to the free end of the support 106 and to a connector (not shown) on the transverse member 122. The pawl support 106 is pivotally moved, against the action of the spring 126, to move the working pawl 107 into successive engagement with the teeth 127 on the ratchet 108. To move the pawl support 106 there is provided a cable 128 having one end attached to a connector 129 on the pawl support 106 (FIG. 5) for extension downwardly about a roller 131 (FIG. 4) for connection of its opposite end at 132 to the cross arm 49 of the rock arm 47. The roller 131 is located on the panel 33 parallel to and adjacent the roller 78. It is seen, therefore, that in response to each actuation of the foot member 46 the ratchet 108 is advanced one tooth 127. A holding pawl 130 carried at the free end of the pawl support 104 is gravity actuated to hold the ratchet 108 in its moved position as provided by the working pawl 107. The above described one tooth advance of the ratchet 108 continues until the working pawl 107 engages the tooth blank 135 on the ratchet 108. At about the same time a high spot 133 on the holding cam 109 moves into engagement with a pivoted hold bar 134 extended transversely of the shaft 99 (FIG. 4) and having one end pivoted at 136 on an end wall of the housing 36.

A cable 137 has one end attached to a laterally extended connector 138 on the hold bar 134 (FIG. 4). From the connector 138 the cable 137 is trained downwardly about a roller 139 and then longitudinally of the housing 36 for travel downwardly about a roller 141 and through the panel 33 for attachment of its opposite end 142 to the free end of a pivoted stop bar 143. The rollers 139 and 141 are mounted on the top of the panel member 33 and the stop bar 143 is pivoted at 144 from the underside of the panel member 33 so as to extend transversely of and below the elevating arm 38.

The cable 137 is of a length such that when the hold bar 134 is resting on the high spot 133 of the holding cam 109 the stop bar 143 is pivoted upwardly to engage and hold the elevating arm 38 against moving the release arm 37 downwardly to its ball releasing position, shown in FIG. 11. Thus, as illustrated in FIG. 9 for so long as the hold bar 134 rides the high spot 133 of the cam 109, the release arm 37 will remain in a ball holding position. As a result after a predetermined number of teeth on the ratchet 108, corresponding in number to the balls to be played, have been advanced, a later actuation of the foot member 46 will be ineffective to provide for a ball being teed on the member 26. Stated otherwise, the elevating arm 38 and guide arm 41 will be moved in all respects the same as when a ball has been delivered thereto, but on each actuation thereof the elevating arm will be retumed to a stop position on the stop bar 143 without providing for any movement of the release arm 37 to its ball releasing position of FIG. 11. The apparatus will thus remain inoperative until another coin is inserted into the coin mechanism 42. On the insertion of another coin 110 the ratchet 108 is rotatable in a clockwise direction by manipulation of the hand knob 119 from its position in FIG. 7 to its position in FIG. 8 concurrently with the rotation of the cam high spot 133 out of engagement with the hold bar 134. The apparatus is thus reset for the driving of another round of balls 24.

For the purpose of simulating competitive play the net structure 27 is provided with the pivoted target assembly 45 comprised of a pair of upright frame members 147 (FIGS. 1 and 15) connected together over their lower portions by a pair of vertically spaced cross members 148. Covering the are between the cross members 148 is a flexible plastic sheet 149. The upper ends of the frame members 147 are connected together by a cross member 146 which is pivotally suspended by knife edge assemblies 151, the fulcrum members 152 of which are mounted on a cross bar 153 that constitutes part of the frame 154 of the net structure 27. The knife edges 155 are formed on end extensions 156 of the cross member 146.

Suspended from the cross bar 153 at a position forwardly of the target sheet 149 is a sheet of canvas or like material 157 having a cut out portion 158 opposite the plastic sheet 149. The cut out 158 is of a smaller size than the plastic sheet 149 so as to shield or cover the upright frame members 147 and cross members 148. Thus, a ball striking the canvas sheet 157 is "out of bounds" since it is not within the area of the target sheet 149 exposed through the cut out 158. Importantly, a driven ball is also prevented from hitting the target frame members 147 and 148 and then rebounding back toward the golfer.

Additionally, it will be seen in FIGS. 16 and 18 that the upright frame members 147 of the target assembly 45 are of a curved shape adjacent the knife assemblies 151. As a result the assembly 45 is inclined downwardly and rearwardly from the vertical plane of the canvas sheet 157. Thus a ball 24 on striking the target sheet 149 is not only prevented from rebounding forwardly, but acts to immediately pivotally move the target sheet 149 in a rearward direction along with directing the ball downwardly onto the converging bottom wall 28 of the net structure 27.

To give an indication as to the number of yards covered by a ball hitting the target sheet 149, a nylon cord 159 has one end attached to the upright frame member indicated as 147a (FIGS. 1 and 16). The other end of the nylon cord 159 is attached to one end of an indicator needle or pointer 161 that is pivoted at 162 intermediate its ends on a mounting plate 163 carried on the net structure 27 adjacent one end of the housing unit 36. The mounting plate carries a scale 164 that is calibrated to indicate yardage corresponding to the rearward pivoted distance which the target sheet 149 is moved when struck by a golf ball. The cable 54 (FIGS. 1 and 4) has one end secured to the indicator 161 at the point of securement of the cord 159 and is then extended into the housing 36 for connection of its opposite end to the cross arm 49 of the rock arm 47.

As shown in FIG. 2 the indicator 161 at its pivot 162 is frictionally held by a spring assembly 167 against free movement relative to the mounting plate 163. Thus, on being moved by the cord 159 in response to a rearward pivoted movement of the target sheet 149 the indicator 161 remains at the moved position to provide for a reading of the yardage on the scale 164. On actuation of the foot member 46 to deliver a next ball to the tee member 26 the cable 54 is actuated to move the indicator 161 back to its rest or neutral position. The indicator is thus set to give a yardage reading for the next drive.

Although the invention has been described with respect to a preferred embodiment thereof, it is to be understood that it is not to be so limited since changes and modifications can be made therein which are within the full intended scope of this invention as defined by the appended claims.

I claim:

1. A golf ball practice driving apparatus for successively teeing-up golf balls comprising:
   a. a ground supported platform having a top surface,
   b. a stationary tee member on said platform projected upwardly from said top surface,
   c. a container for golf balls having a discharge chute for a single row of balls,
   d. means on said platform located below said top surface for releasing only the lead ball from said row of balls to a location below said top surface,
   e. means for moving said released ball from said location to a position above said surface,
   f. means on said platform positioned above said top surface for receiving a released ball at said position above said surface and delivering said released ball downwardly to a teed position on said stationary tee member,
   g. means on said platform for operating said releasing means and receiving and delivering means having a manually operated actuating member, and
   h. means interconnecting said releasing means and receiving and delivering means with said operating means for sequential operation in response to actuation of said actuating member.

2. A golf ball practice driving apparatus for successively teeing-up golf balls comprising:
   a. a ground supported platform,
   b. an upright tee member on said platform,
   c. a foot operated member movably supported on said platform having a foot engageable portion projected upwardly from the platform,
   d. a container for golf balls having a discharge chute for a single row of balls,

e. means on said platform for releasing only the lead ball from said row of balls,
f. means on said platform for receiving a released ball and delivering said released ball to a teed position on said tee member,
g. means interconnecting said releasing means and receiving and delivering means with said foot operated lever for sequential operation in response to an actuation of said foot engageable portion,
h. said discharge chute having a terminal end and said releasing means including a pivoted arm member,
i. means pivotally supporting said arm member on said platform for up and down movement of one end portion thereof into and out of closing position with said terminal end,
j. means for biasing said one end portion into said closing position,
k. said ball receiving and delivering means including a pivoted ball-elevating member movable to a horizontal position normal to said arm member at the terminal end of said discharge chute with the free end thereof engageable with the arm member to move said arm member, against the action of said biasing means, out of a closing position with said terminal end whereby a released ball is permitted to drop onto said free end, and
l. said ball-elevating member movable to an upright position on actuation of said foot engageable portion to elevate the released ball, whereby to permit movement of said arm member to a chute closing position by said biasing means.

3. The golf ball practice driving apparatus of claim **2** wherein:

a. said ball-receiving and delivery means includes a pivoted ball-guide means located in a vertical plane parallel to a vertical plane extended longitudinally of said arm member,
b. means pivotally supporting said guide means intermediate the ends thereof at an elevated position relative to the axes of said elevating member and arm member,
c. said guide means, on actuation of said foot engageable portion, being movable to a first position wherein one end thereof is located to receive a released ball from said elevating member in the upright position therefor, and to a second position wherein the opposite end thereof is located to guide the released ball onto said tee member, and,
d. biasing means for moving said opposite end of the guide means away from said tee member when said foot engageable portion is released.

4. A golf ball practice driving apparatus for teeing up golf balls in succession comprising:

a. a platform,
b. a golf ball container on said platform having an outlet portion for discharging balls in a single file,
c. an upright tee member on said platform,
d. a ball elevating means movably mounted on the platform having a ball supporting portion movable from a lower ball-receiving position to an upper ball-discharge position,
e. a selector unit for separating the lead ball in said file from the remaining balls in the file for reception on said ball-supporting portion in the lower position thereof,
f. a track means movably mounted on the platform for up and down movement, said track means in the lower position therefor having one end portion located to deposit a ball on said tee member, and an opposite end portion spaced from said supporting portion in the ball-discharge position therefor, and said track means in the upper position therefor having said one end portion located remote from the tee member and the opposite end portion located to receive a ball from said ball-elevating means when said supporting portion is in the ball-discharge position therefor,
g. a foot operated member movably supported on said platform having a foot actuated portion projected upwardly from said platform, and
h. means interconnecting said elevating means, said selector unit and said track means with said foot operated member for sequential operation in response to an actuation of said foot portion, to provide for the movement of said lead ball from said outlet portion to a teed position on said tee member.

5. The golf ball practice driving apparatus of claim **4** including:

a. means for holding said opposite end of the track means against movement away from said tee member until after said foot actuated portion has been moved to a fully actuated position.

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