

[54] **FRONTALLY RAISEABLE VEHICLES
AMUSEMENT APPARATUS**
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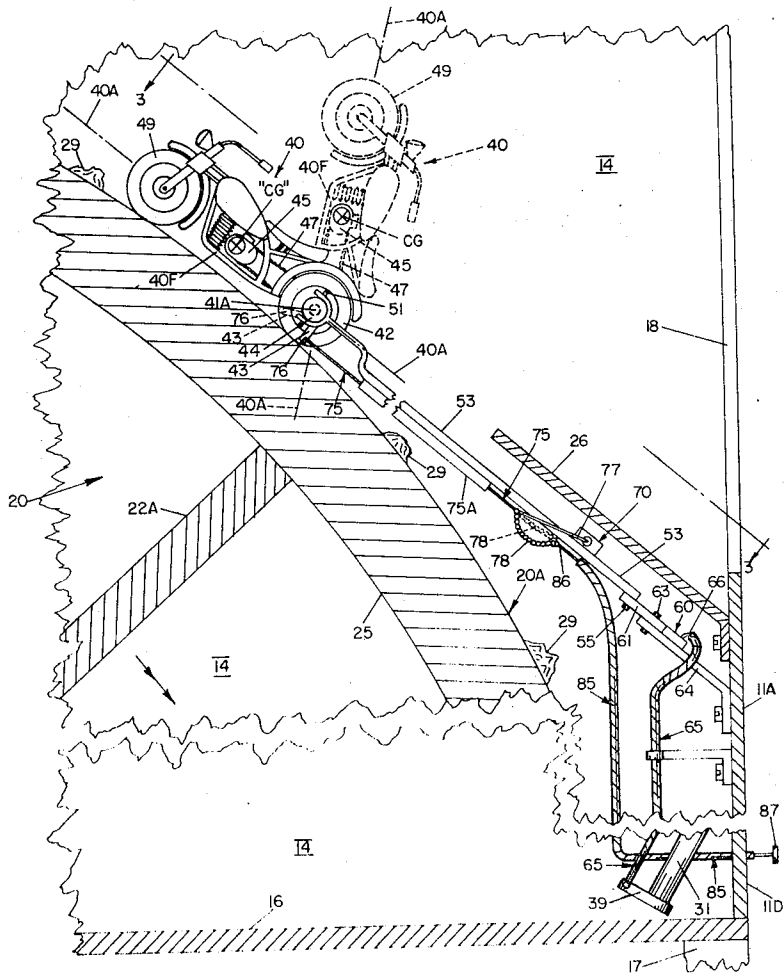
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[57] **ABSTRACT**

There is provided amusement apparatus comprising a miniature simulated vehicle positioned within an upright hollow housing, and remotely controllable by a rearwardly externally positioned operator, the apparatus vehicle simulating the front-end raising or "wheelie" effect of a typical land-vehicle as it might rapidly traverse inclined or uneven terrain whereby pronounced vertical accelerations are subjectable thereto (and especially evident at the land-vehicle's forward-portion). The amusement apparatus also preferably includes a simulated-terrain drum located within the housing frame, means a drive wheel on the the vehicle frictionally engaging the drum for causing relative longitudinal velocity between the simulated-terrain and vehicle, protuberances on the drum extending between the vehicle and the simulated-terrain for vertically upwardly accelerating the vehicle such that the forward-portion thereof pivots upwardly, or "wheelies," about its rearward-portion, and operator remote control steering linkage to steer the vehicle around the protuberances or preventing, or at least minimizing, vertical accelerations to the vehicle forward-portion, and a cable for rehabilitating an immobilized upended vehicle.

11 Claims, 3 Drawing Figures



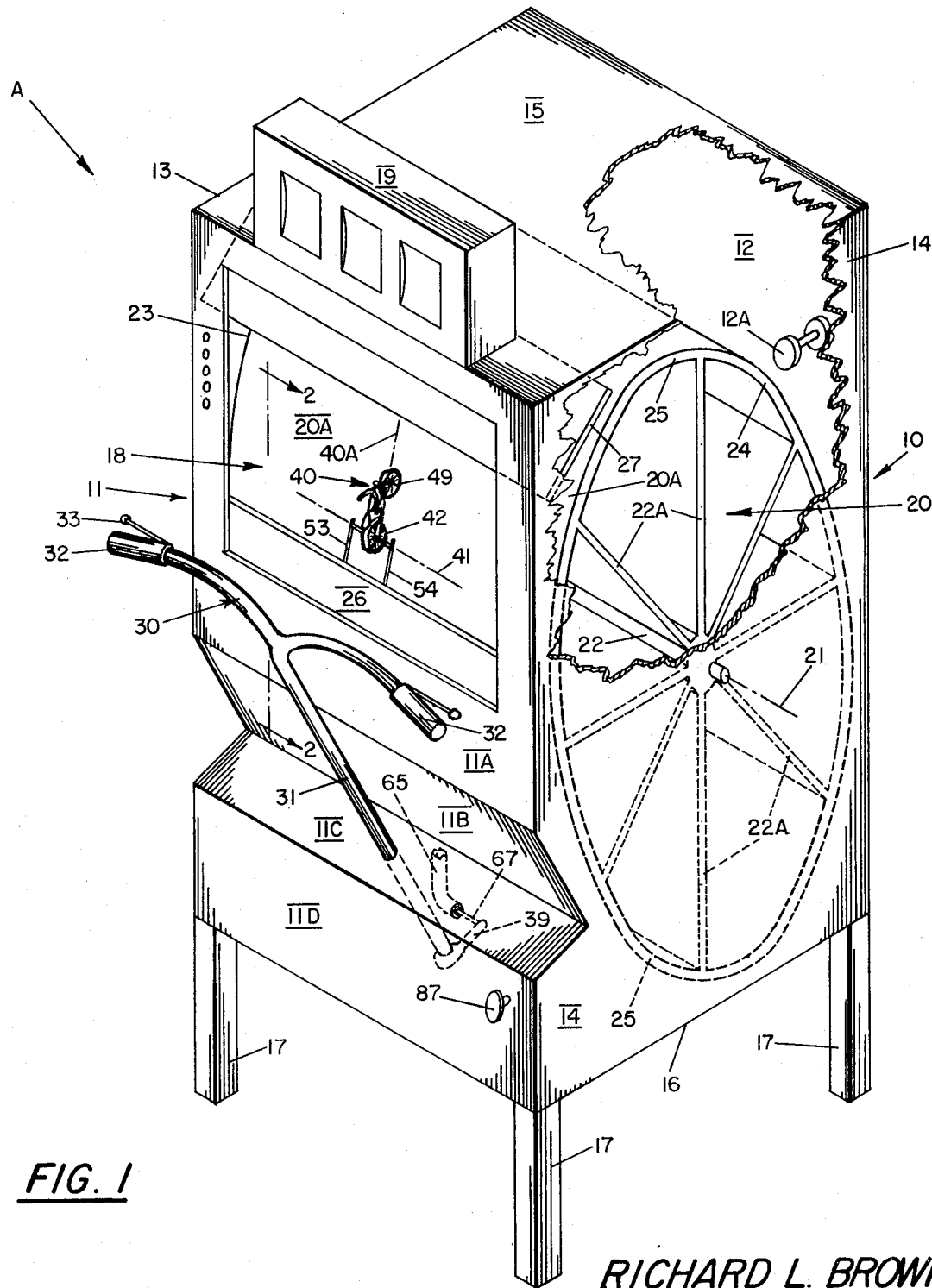
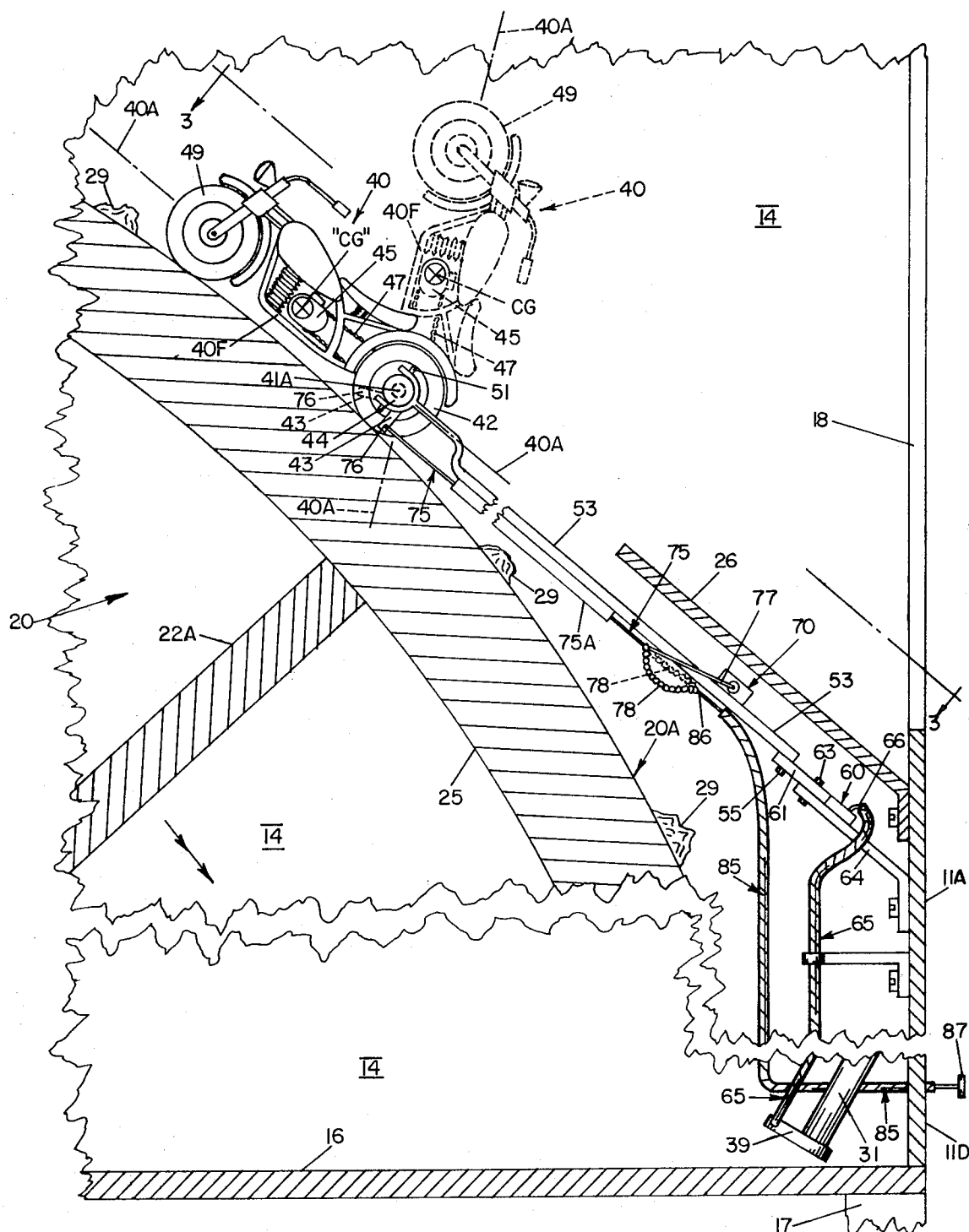


FIG. 1

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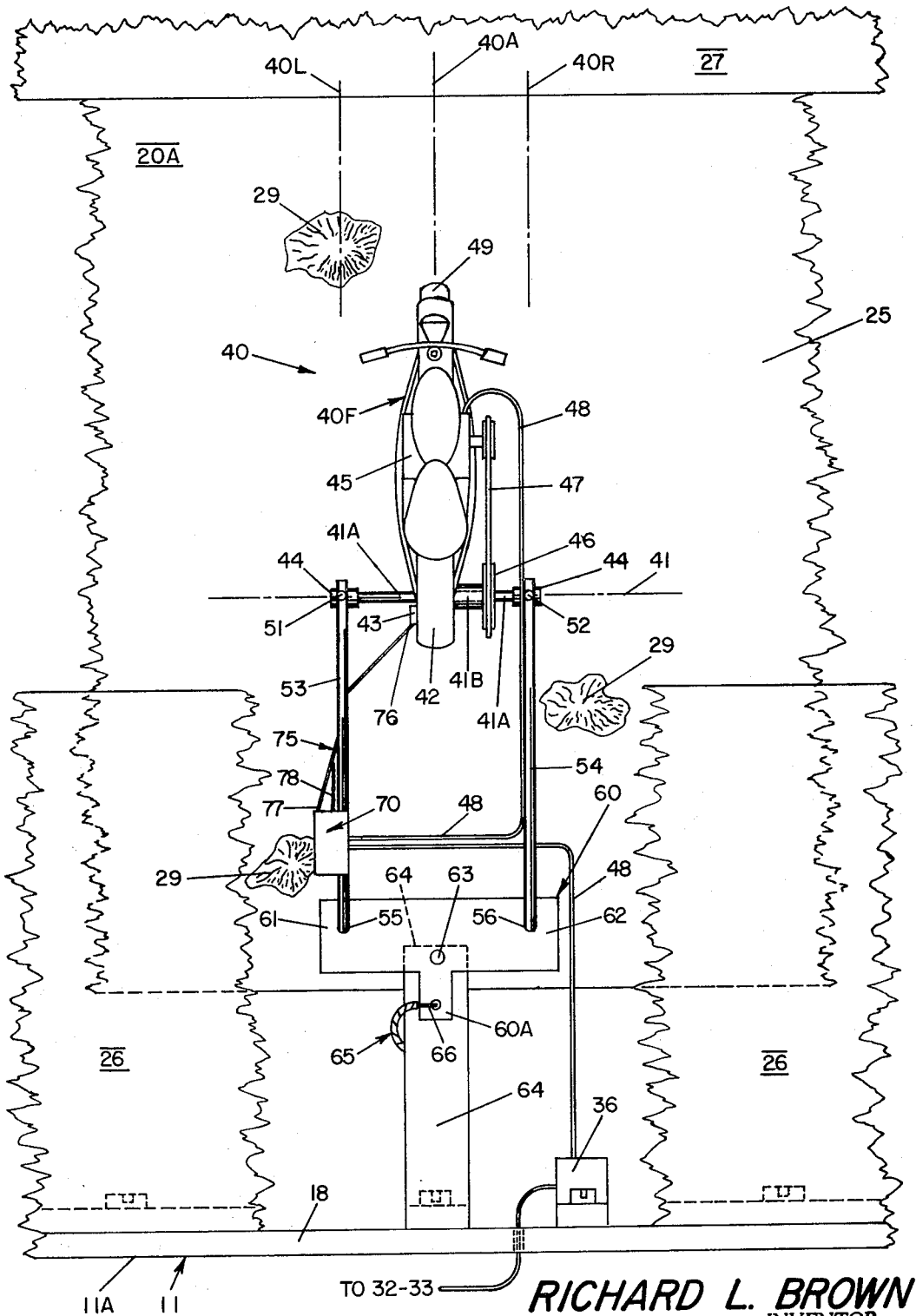


FIG. 3

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FRONTALLY RAISEABLE VEHICLES AMUSEMENT APPARATUS

It is a well known principle of dynamics science that when a land-vehicle, such as motorcycles, rear-wheel drive automobiles, etc., forwardly rapidly traverses along the underlying terrain, the land-vehicle forward-portion can be coincidentally subjected to vectorially vertical upward accelerations. Such coincidental vertical accelerations will tend to, and oftentimes actually do, raise the land-vehicle's forward-portion right off the underlying terrain. For example, one such type vertical acceleration might be induced when the forwardly moving land-vehicle's depending forward-portion collides with a bump, a rock, or other upwardly extending terrain aberration or protuberance. Similarly, when higher angular accelerations are applied to the land-vehicle's rearward drive-wheel(s), the resultant high torques can also produce such front-end raising phenomenon. When the underlying terrain is an upwardly inclined slope, the front-end raising phenomenon, which is oftentimes referred to as a "wheelie," is especially likely to occur, through either terrain upward protuberances, or the drive-wheel(s) torque, or both together. With either such acceleration-induced front-end raising or "wheelie," higher degrees thereof can raise the forward-portion to such extent that the land-vehicle's center-of-gravity becomes positioned rearwardly of the rear-axle and the land-vehicle has become "stopped," uncontrollable, or otherwise temporarily immobilized and unable to continue forwardly.

The front-end raising or "wheelie" phenomenon offers a thrilling experience to operators of motorcycles and other highly powered land-vehicles, to the extent that many participants and spectators have been attracted thereto. For example, there are "drag" races on relatively flat terrain. In vehicle hill climb contests as with motorcycles and other highly powered land-vehicles, highly experienced participants race against each other or against the clock, in climbing the terrain, their ascent velocity being limited by the "wheelie" effect. However, many would-be participants have been deterred therefrom because of the danger associated with such endeavor, or by the capital investment required for the specially high powered land-vehicles, or by the fact that the special terrains reserved for such activity are relatively few in number or geographically remote from populated areas.

It is accordingly the general object of the present invention to provide an amusement apparatus of the type comprising a miniature simulated vehicle positioned within an external frame such as an upright hollow housing wherein the rearwardly externally positioned apparatus operator can realistically vicariously participate in the thrilling experience of the front-end raising or "wheelie" of a rapidly forwardly moving land-vehicle, the vicarious participation being through the miniature vehicle and an underlying housed simulated-terrain.

It is another object to provide an amusement apparatus wherein the miniature vehicle is so positioned and supported with respect to a housed simulated inclined slope that the vehicle forward-portion is subjectable to vertically upward acceleration forces very similar to that of a full size land-vehicle rapidly climbing inclined terrain.

It is a further object to provide an amusement apparatus wherein the operator can remotely control the miniature vehicle so as to participate in a simulated hill climb race, his ascent rate being realistically limited by the vehicle "wheelie" effect and by the operator's ability to minimize or to avoid the front-end raising "wheelie" phenomenon.

It is yet another object to provide an amusement apparatus amenable to the inclusion of score keeping means therewith to award score to the operator for his ability to hill climb at a rapid velocity, and dependent upon his ability to minimize the "wheelie" phenomenon occurring at higher relative velocities between the simulated-terrain and the miniature vehicle associated therewith.

It is a further object to provide an amusement apparatus wherein the simulated rapidly forwardly moving vehicle is subjectable to one or both types of the vertical accelerations that can provide the front-end raising or "wheelie" phenomenon, wherein the remotely positioned operator can make compensatory adjustment during minor "wheelies" to prevent vehicle immobilization, and wherein the operator, if a "wheelie" is severe in amplitude to temporarily immobilize the vehicle, can take corrective action (though with score or time penalty) to re-stabilize the vehicle and to resume the vehicle race.

With the above and other objects and advantages in view, which will become more apparent as this description proceeds, the amusement apparatus of the present invention generally comprises a suitable frame member having a simulated miniature vehicle and underlying simulated-terrain in conjunction therewith and viewable to an operator positioned rearwardly externally of the frame, means for causing relative longitudinal velocity between the vehicle and simulated-terrain and means operatively extending between the vehicle and terrain for vertically accelerating the vehicle forward-portion upwardly away from the simulated-terrain to provide the front-end raising or "wheelie" phenomenon, and means at the frame rearward part to allow the operator to remotely control the said relative longitudinal velocity and also the said vertical acceleration, and preferably also to remotely rehabilitate "wheelie" immobilized upended-conditions of the miniature vehicle.

In the drawing, wherein like characters refer to like parts in the several views, and in which:

FIG. 1 is a perspective view of a representative form of the amusement apparatus of the present invention, rearward and lateral portions of a hollow housing type frame being broken away to shown certain internal constructional details.

FIG. 2 is a sectional elevational view taken along line 2—2 of FIG. 1.

FIG. 3 is a sectional plan view taken along a longitudinally extending line 3—3 of FIG. 2.

Referring initially and briefly to FIG. 1, which illustrates in perspective view a preferred embodiment "A" of the frontally raiseable vehicles amusement apparatus of the present invention. Apparatus "A" generally comprises: a frame herein as an upright hollow housing 10 including an upright rear-panel 11 having a light transmissive opening 18 whereby an external operator might view into the housing interior; an inclined slope

simulated-terrain located within housing 10, said slope being herein provided by revolvable drum 20, the drum's upper-rearward quadrant being viewable to the operator and providing a forwardly-upwardly longitudinally extending inclined slope 20A; a miniature surface vehicle 40 located within and herein attached to housing 10 and located immediately above the inclined slope (20A), said vehicle being pivotable upwardly about its rearward-portion(41), which remains at relatively constant elevation; means for causing relative longitudinal velocity between the slope and vehicle, herein as a relatively stationary vehicle 40 and the revolving drum 20; means operatively extending between the vehicle and simulated-terrain slope for accelerating the vehicle forward-portion (49) vertically upwardly and away from the inclined slope, such as through the vehicle's angularly acceleratable rear drive-wheel(s) firmly contacting slope 20A, or drum upward protuberances (29) adapted to collide with the vehicle depending forward-portion (49); and means, such as at manual controls 30, whereby the operator from the housing rear-panel 11 can control the vehicle-to-slope relative longitudinal velocity and vertical acceleration.

Upright hollow housing 10 comprises a plurality of interconnected panels 11-16, herein as a pair of horizontal rectangular planar panels including a roof-panel 15 loftily overlying a floor-panel 16, a vertical rectangular planar front-panel 12, a pair of vertical generally rectangular planar lateral-panels including left-panel 13 and right-panel 14, and a generally vertically extending rear-panel 11. A plurality of legs 17, herein four in number, depend from the respective corners of floor-panel 16 to elevate the relatively stationary housing 10 above an underlying substrate (not shown). A scoreboard 19 is shown supported upon housing roof-panel 15. Rear-panel 11 comprises four rectangular planar sections including a vertical upper-section 11A that provides the major height of rear-panel 11, a second-section 11B extending obliquely forwardly-downwardly of the upper-section lower horizontal terminus, a fourth-section 11D extending vertically upwardly from floor-panel 16, and a third-section 11C extending obliquely forwardly-upwardly of the fourth-section upper horizontal terminus to intersect the second-section 11B. The steering column portion 31 of manual controls 30 extends obliquely upwardly-rearwardly of third-section 11C and is revolvably secured thereto, whereby the steering column lower terminus (at 39) is located within housing 10. The light transmissive opening of rear-panel 11 herein takes the form of a rectangular opening 18 in upper-section 11A.

There is herein an inclined slope as a simulated-terrain located within housing 10 and viewable to a rearwardly externally positioned operator as he peers forwardly through the rear-panel opening, e.g., 18. While the simulated inclined slope might be provided in various ways, the revolvable drum embodiment is preferred. For example, there is a generally cylindrical drum 20 revolvable about a transversely extending horizontal drum-axis 21. Herein, revolvable drum 20 comprises a horizontal drum-axle 22 (extending transversely along drum-axis 21) and being revolvably supported at the respective lateral-panels 13 and 14.

Revolvable drum 20 also includes an annular portion 25 that circularly surrounds drum-axis 21 to provide a cylindrical drum surface, annulus 25 being connected to drum-axle 22 with radially extending ribs 22A. Drum 20 has a left end 23 nearer housing left-panel 13 and a right end 24 nearer to housing right-panel 14 whereby the transverse width 23-24 of drum 20 is wider than the rear-panel opening 18. As had been alluded to earlier, the rearward-upper quadrant 20A of revolvable drum 20, which quadrant is seen through the rear-panel opening 18, provides a longitudinally forwardly-upwardly extending simulated inclined slope which also has a transversely extending width (such as 23-24). The simulated slope 20A might be visually defined lengthwise by a pair of transversely extending opaque masks located within housing 10 at opening 18. Herein, there is an upwardly extending lower-mask 26 connected to rear-panel upper-section 11A, and an upper-mask 27 extending rearwardly-downwardly of roof-panel 15. Thus, if the miniature vehicle, e.g., 40, be relatively stationary longitudinally, and if the drum 20 were made to rotate about drum-axis 21 (as toward rear-panel 11), then such relative longitudinal velocity between slope to vehicle would make it appear to the rearwardly positioned operator that vehicle 40 is traveling longitudinally forwardly along the simulated-terrain 20A. Though less preferred for the purposes herein, relative longitudinal velocity means between the simulated-terrain and vehicle could also be provided with a longitudinally forwardly movable vehicle.

The general concept of this invention relates to amusement apparatus wherein a rearwardly remotely controlled miniature vehicle is subjected to the front-end raising or "wheelie" phenomenon. In this vein, there are vertical acceleration means operatively extending between the miniature vehicle and the underlying simulated-terrain so that the vehicle's forward-portion is caused to raise, i.e., to lift, vertically away from the simulated-terrain(the vehicle's rearward-portion being relatively unaffected elevationally by such front-end raising vertical acceleration forces). The miniature vehicle, herein as a simulated longitudinally extending motorcycle 40, has a rearward-portion such as rearward drive-wheel 42 surrounding the vehicle's rear-axis 41. Moreover, the vehicle has a forward-portion (herein having a front-tire 49 as the vehicle's depending forward terminus) extending longitudinally forwardly of rearward-portion 41-42. Assuming that the vehicle is so associated with the frame (as through longitudinally extending parallel arms 53 and 54 attached to housing 10) that the vehicle at its rear-axis 41 remains of substantially constant elevation, then the slope-to-vehicle vertical acceleration means might be provided in one or both of the two following ways. In the first type, the vertical acceleration to the vehicle forward-portion is caused when a high impact collision occurs between the vehicle depending forward end (49) and an upwardly extending protuberance (29) on the simulated-terrain. This would simulate the situation when a full size land-vehicle strikes a rock or a sharp mound as it forwardly traverses a pathway. In this vein, the drum cylindrical surface 25 might be provided with one or more sharp bulges or protuberances 29 adapted to strike the vehicle's depending front-tire 49. In the second type, the vertical acceleration to the vehicle

forward-portion is caused when the vehicle's rearward drive-wheel(s), during rapid angular acceleration, produces sufficiently high torque about the vehicle rear-axis 41. In this vein herein, there are powering means, such as electric motor 45, to provide a continuum of selectable angular velocities to drive-wheel 42, which drive-wheel frictionally abuts against the directionally oppositely revolvable drum 20 at 20A.

Referring now more specifically to FIGS. 2 and 3, the motorcycle type miniature vehicle 40 generally comprises a transversely extending horizontal rear-axis 41, a rearward tire drive-wheel 42 revolvably surrounding a rear-axis 41 (having rear-axle 41A therealong), a vehicle forward-portion extending longitudinally forwardly and upwardly of the vehicle rearward-portion 41-42 along the vehicle lengthwise-axis 40A. The vehicle forward-portion includes a longitudinally extending rigid frame 40F having the vehicle's center-of-gravity "CG" or "X" therealong and having as a forward terminus the depending front-tire 49. Vehicle 40 is pivotably attached to housing 10 as through a pair of longitudinally extending parallel elongate arms 53 and 54, the forward extremities of arms 53 and 54 being pivotably attached with pins 51 and 52 to the non-rotatable collars 44 which are attached to the two respective ends of vehicle rear-axle 41A. The depending rearward ends 55 and 56 of the respective arms 53 and 54 are revolvably secured to the respective transversely extending wings 61 and 62 of T-bar 60. A central portion of T-bar 60 is pivotably attached with a vertical pin 63 to a forward part of bracket 64 that is attached to and extends forwardly and upwardly of rear-panel 11 from beneath lower-mask 26. Thus, as can be seen in solid line in FIG. 2, the miniature motorcycle vehicle 40 has a relatively stable lower normal-condition wherein the lengthwise-axis 40A extends in the simulated-terrain longitudinal direction and wherein the vehicle forward-portion is at a relatively low normal first-station (such as when front-tire 49 abuts slope 20A). It is evident from the drawing that arms 53 and 54, bracket 64, lower-mask 26, section line 3-3, and the vehicle lengthwise-axis 40A (when the vehicle is at normal-condition) are substantially parallel to each other and extend in the upwardly and forwardly longitudinal direction. However, during the front-end raising or "wheelie," the simulated vehicle forward-portion and including lengthwise-axis 40A pivots upwardly and rearwardly as at 42 about its substantially constant elevation rear-axis 41. As best seen in phantom line in FIG. 2, the miniature vehicle under progressively higher "wheelie" amplitudes, might ultimately reach another stable condition (herein called the upended-condition) wherein the vehicle's center-of-gravity is located rearwardly of the vehicle rear-axis 41. The vehicle phantom line upended-condition is analogous to the situation where a full size typical land-vehicle becomes temporarily immobilized by a severe "wheelie" such that its forward progress is stopped until the operator takes drastic corrective action.

As had been alluded to earlier, a collision between a drum protuberance (29) and the miniature vehicle depending forward-portion (49) can produce the "wheelie" phenomenon. Moreover, a severe such collision, as when drum 20 is rotating at higher velocities, can cause such vehicle to reach the upended-condition.

In order to avoid the "disastrous" upended-condition, there are means to permit the remotely rearwardly positioned operator to transversely steer the miniature vehicle away from the upward protuberances 29 of the simulated-terrain. In this regard, the leading end 66 of a flexible "push-pull" type sheathed cable 65 is attached to the third wing 60A of pivotal T-bar 60, while the cable trailing end 67 is attached to a radial extension 39 at the lower end of rotatable steering column 31. As had been indicated earlier, the rear-axle 41A, the parallel elongate arms 53 and 54, and the colinear wings 61 and 62, together provide an elongated parallelogram pivotal linkage to permit (through steering column 31 and the sheathed cable assembly 65) transverse displacements e.g., 40L, 40R, of the simulated vehicle lengthwise-axis 40A. Thus, whenever the rearwardly remote operator transversely re-aligns the handle grips 32, after having caused a transverse steering maneuver to vehicle 40, the lengthwise-axis is realistically re-established in the simulated-terrain longitudinal direction.

For the second type induced "wheelie," or that effected through high torques applied to the vehicle's rearward drive-wheel(s), there is necessarily some kind of powering means for providing a selectable continuous range of angular velocities to said drive-wheel(s), e.g., 42. If the vehicle rear-axle 41A be of substantially constant elevation and the rearward drive-wheel 42 frictionally abuts the drum cylindrical outer side 25, then the rotation of drive-wheel 42 in a first angular direction about rear-axis 41 will cause drum 20 to rotate in the opposite second angular direction and about drum-axis 21 thereby providing relative longitudinal velocity between the vehicle 40 and slope 20A. However, higher torques upon abrupt acceleration in angular velocity to the rearward drive-wheel 42 can cause the vehicle forward-portion, e.g., 40F, to be vertically accelerated and directionally away from the simulated-terrain 20A. Accordingly, vehicle 40 would pivot upwardly and rearwardly about the substantially constant elevation rear-axis 41 directionally analogous to the terrain protuberance type "wheelie" described in the preceeding paragraph. Herein, the powering means takes the form of a small electric motor 45 attached to vehicle frame 40F, motor 45 being of the variable speed type and having a powerably revolvable pulley thereon. Revolvably surrounding rear-axis 41 is a hub 46 that is co-revolvably attached to drive-wheel 42 with a sleeve 41B surrounding the herein non-revolvably rear-axle 41A; an annular drive-chain 47 extends as a power transmission from the electric motor pulley to hub 46. Electrical energy is supplied from an external source (not shown) to electrical motor 45 through electrical conductor wire 48, which conductor 48 extends from motor 45, along arm 54, and (preferably via switch 70) to rheostat 36 which is attached to the inside of housing rear-panel 11. Rheostat 36, which determines the voltage delivered to motor 45 and thus the angular velocity of drive-wheel 42, is manipulated at the control means 30 as through levers 33 depending from handle grips 32. It can be readily seen that, should either induced type "wheelie" effect occur, the operator can readily normalize vehicle 40, e.g., return it to normal-condition, simply by decreasing the velocity of drive-wheel 42, as through controlling rheostat 36 through the speed control, e.g., 33.

As had been previously alluded to, if the vehicle "wheelie" conditions become too severe (as when the center-of-gravity "CG" or "X" becomes located rearwardly of rear-axis 41), the vehicle attains the "temporarily immobilized" upended-condition. During the minor "wheelies" existing until upended-condition is reached, the vehicle remains capable of continuing its relative forward longitudinal velocity. The apparatus herein preferably includes means for distinguishing between minor "wheelies" and the upended-condition and also means for automatically extinguishing the relative longitudinal velocity between the vehicle and the simulated-terrain.

The means to extinguish the relative longitudinal velocity between simulated vehicle 40 and revolvable drum 20 as said vehicle has attained the severe "wheelie" upended-condition might be through an "on-off" type switch means, such as electrical switch 70 carried on leftward arm 53. There is an elongate spring-arm 75 having its rearward end 77 actuatably connected to switch 70 and having its forward end 76 attached to a lug 43 that extends rigidly transversely of the vehicle frame substantially at rear-axis 41. The major length of spring-arm 75 is loosely surrounded by a tube 75A extending along and carried by the underside of leftward arm 53. Thus, it is readily apparent that when vehicle 40 at lug 43 reaches the phantom line upended-condition, spring-arm 75 will be pulled forwardly, thus deactuating switch 70 from "on" to "off" whereupon motor 45 (through conductor 48) is deactuated to stop drive-wheel 42 (and too the frictionally co-driven drum 20) thereby stopping the vehicle's "forward longitudinal progress." In order to overcome the angular inertia of heavier drums (20), a reciprocable brake 12A adapted to bear from housing 10 against the drum periphery (25) might be optionally employed. Electrical means (not shown) would extend from the switch 70 at "off" condition to activate brake 12A. To restore the upended-condition vehicle back to normal-condition, an elongate "push-pull" sheathed cable assembly 85, analogous to assembly 65, might be employed. The forward end 86 of cable assembly 85 is attached, via flexible beaded connector-link 78, to a rearward part of elongate spring-arm 75. As seen in solid line in FIG. 2, connector-link 78 is slack when vehicle 40 is at normal-condition. However, connector-link 78 becomes relatively tighter when the vehicle has attained upended-condition (lug 43 and spring-arm 75 being forwardly displaced), switch 70 being "off." When the operator at 87 pulls upon the cable assembly 85, spring-arm 75 and lug 43 are brought rearwardly thus restoring vehicle 40 to normal-condition; switch 70 is coincidentally moved from "off" to "on" causing motor 45 and drive-wheel 42 to be reactivated and thereby re-instating a relative longitudinal velocity between vehicle 40 and drum type slope 20A. While the "push-pull" cable assembly 85 might be manually actuated by the operator at the housing rear-panel 11, timedelayed automatic control of switch 70 via an independently powered unit might also be utilized. In this way the apparatus could be programmed to penalize the operator for having had allowed minor "wheelies" to develop into a vehicle upended-condition.

The apparatus scoring, e.g., recordable at scoreboard 19, might be programmed mechanically or electronically in various ways. For example, the opera-

tor's time in "forwardly traversing" the drum full circumference 25 might be recorded at the scoreboard. Penalties can also be recorded whenever the operator fails to take corrective action during minor "wheelies" such that a vehicle upended-condition occurs. Countdown button lights, such as seen in FIG. 1 at rear-panel area 11A, might be employed to give the operator a realistic "race type start." These and other appropriate means might be utilized in conjunction with the basic structural concepts herein to allow the operator to vicariously realistically participate in the typical land-vehicle "wheelie" phenomenon.

From the foregoing, the construction and operation of the front-end raising vehicles amusement apparatus will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

I claim:

1. An amusement apparatus simulating the raising effect upon the forward-portion of a typical forwardly traverseable land-vehicle as a said land-vehicle is thereby subjected to vectorially vertical acceleration forces relative to underlying terrain, said amusement apparatus comprising:
 - A. An upright hollow housing as a frame for the apparatus and including a rearward part with a light transmissive opening therethrough whereby an operator positioned immediately rearwardly of the housing might have a view forwardly into the housing interior;
 - B. A simulated-terrain located within said housing and viewable through the said rearward part opening, said simulated-terrain extending in longitudinal direction generally forwardly of the housing open rearward part;
 - C. A surface vehicle and including along the lengthwise-axis thereof a vehicle forward-portion and an integrally connected rearward-portion that intersects a transversely extending rear-axis, said vehicle having relative to the longitudinal direction of the simulated-terrain a relatively stable normal-condition wherein the vehicle lengthwise-axis extends in the simulated-terrain longitudinal direction and wherein the vehicle forward-portion is at a relatively low normal first-station, said vehicle commencing at the said first-station being upwardly and rearwardly pivotable, axially with respect to the vehicle's rear-axis, whereby the vehicle is capable of performing a frontally raiseable "wheelie;"
 - D. Means for causing longitudinally extending relative velocity between the vehicle and the underlying simulated-terrain; and
 - E. Means operatively extending between the vehicle and the simulated-terrain for accelerating the vehicle-forward-portion vertically away from the first-station thereof, said vehicle forward-portion vertical acceleration means being remotely controllable by the apparatus operator from the housing rearward part.

2. The frontally raiseable vehicle amusement apparatus of claim 1 wherein the hollow housing frame includes an upright rear-panel as the rearward part thereof; wherein the simulated-terrain is an inclined slope extending in longitudinal direction generally upwardly and forwardly with respect to the housing rear-panel; wherein the vehicle lengthwise-axis at vehicle normal-condition extends generally forwardly and upwardly with respect to the housing upright rear-panel and wherein the vehicle center-of-gravity is located forwardly of the rear-axis thereof; wherein the vehicle at the transversely extending rear-axis thereof is pivotably associated with respect to the housing; and wherein the vertical acceleration means operatively extending between the simulated-terrain inclined slope and the vehicle includes slope-to-vehicle vertical acceleration means.

3. The frontally raiseable vehicle amusement apparatus of claim 2 wherein the vehicle-to-slope vertical acceleration means comprises at least one pronounced upward protuberance on the inclined slope, the vehicle forward-portion being of a depending configuration and adapted to abutably collide with said slope protuberance; and wherein there are steering control means at the housing rear-panel and operatively extending therefrom to the surface vehicle whereby the operator can transversely steer the vehicle to avoid collision between a said slope protuberance and the vehicle depending forward-portion.

4. The frontally raiseable vehicle amusement apparatus of claim 2 wherein the vehicle comprises at least one rearward drive-wheel that revolvably surrounds said rear-axis and that is firmly abutable against said inclined slope; powering means to cause said rearward drive-wheel to rotate about the vehicle rear-axis and within a selectable continuum of angular velocities, higher torques thereby applied to the drive-wheel while rotatably abutting the slope providing a vehicle-to-slope vertical acceleration means sufficient to raise the vehicle forward-portion away from the normal first-station thereof; and means at the housing rear-panel to permit the operator to selectively continuously vary the angular speed of the drive-wheel through the powering means.

5. The amusement apparatus of claim 4 wherein there is within the hollow housing a generally cylindrical drum revolvable about a transversely extending drum-axis, the forward-upper portions of said drum providing the longitudinally extending simulated inclined slope; wherein the powering means for the rearward drive-wheel comprises an electric motor carried by said surface vehicle; and wherein the rearward drive-wheel frictionally abuts the revolvable drum whereby said drum and drive-wheel rotate in opposite angular directions to provide the longitudinal relative velocity between the vehicle and the drum type slope.

6. The amusement apparatus of claim 5 wherein the revolvable drum includes at least one pronounced upward protuberance, the vehicle forward-portion being of a depending configuration and being adapted at the vehicle normal-condition to abutably collide with a said drum protuberance; and wherein there are means at the housing rear-panel and manipulatable independently of the drive-wheel controlling velocity means to transversely steer the vehicle away from the said at least one drum protuberance.

7. The amusement apparatus of claim 6 wherein the vehicle is a simulated motorcycle having a depending front-tire as the depending forward-portion thereof and having single rearward drive-wheel revolvably surrounding the vehicle rear-axis; wherein the means for pivotably associating the vehicle with respect to the housing includes an elongated parallelogram linkage attached to the housing rear-panel and extending forwardly and upwardly therefrom and pivotable connected to the vehicle on opposite transverse sides of the rearward drive-wheel, rearward portions of said parallelogram linkage being connected to the steering control means; and wherein there are means for automatically extinguishing the relative longitudinal velocity between the vehicle at an upended-condition thereof and the drum type slope and comprising an on-off type switch that is deactuated from "on" to "off" as the upwardly-rearwardly pivotal vehicle attains the upended-condition, said on-off switch means being attached to one of the elongate arms of said parallelogram linkage, together with an elongate spring connected to the vehicle rearward-portion and extending rearwardly-downwardly therefrom to the said on-off switch means.

8. The amusement apparatus of claim 2 wherein the said pivotably supported vehicle has at least two stable conditions including, in addition to the said normal-condition, an upended-condition wherein the forward-portion is at a second-station that is rearwardly and upwardly withdrawn from the lower first-station and wherein the vehicle's center-of-gravity is located rearwardly of the vehicle rear-axis; means for automatically extinguishing the longitudinal relative velocity between the vehicle and the inclined slope as the vehicle has moved from normal-condition to upended-condition; and wherein there are means at the housing rear-panel to permit the external operator to restore the vehicle from upended-condition to normal-condition and to then reinstate a longitudinal relative velocity between the vehicle and the inclined slope.

9. The amusement apparatus of claim 8 wherein the vehicle rear-axis is of substantially constant elevation; wherein the hollow housing has therewithin a generally cylindrical drum that is revolvable about a transversely extending drum-axis, upper-rearward portions of said drum providing the longitudinally extending simulated inclined slope whereby said revolvable drum also comprises the longitudinal relative velocity means between the vehicle and the drum type simulated inclined slope; and wherein the means for automatically extinguishing the longitudinal relative velocity between the vehicle at upended-condition and the drum type inclined slope comprises an on-off type switch being deactuated from "on" to "off" as the upwardly-rearwardly pivotable vehicle attains the upended-condition, said on-off switch at "off" condition ultimately disabling the drum from rotating about the transversely extending drum-axis.

10. The amusement apparatus of claim 9 wherein the vehicle comprises at least one rearward drive-wheel that revolvably surrounds said rear-axis and that is firmly frictionally abutable against said revolvable drum; an electric motor carried by said vehicle and actuatably connected to the rearward drive-wheel to cause said drive-wheel to rotate about the vehicle rear-axis thereby providing together with the frictionally engaged drum both the longitudinal relative velocity

means between the vehicle and the drum type inclined slope and also a vehicle-to-slope vertical acceleration means at higher drive-wheel torques sufficient to provide a vehicle "wheelie."

11. An amusement apparatus simulating the raising effect upon the forward-portion of a typical forwardly traverseable land-vehicle as a said land-vehicle is thereby subjected to vectorially vertical accelerations relative to the underlying terrain, said amusement apparatus comprising:

A. A frame member including a rearward part thereof;

B. A longitudinally forwardly and upwardly extending simulated-terrain attached to said frame member;

C. A surface vehicle and including along the lengthwise-axis thereof a vehicle forward-portion and an integrally connected rearward-portion that intersects a transversely extending rear-axis, said vehicle having relative to the longitudinally extending direction of the simulated-terrain a normal-condition wherein the vehicle lengthwise-axis

extends in the simulated-terrain longitudinal direction and wherein the vehicle forward-portion is at a relatively low normal first-station, said vehicle commencing at the first-station thereof being upwardly and rearwardly pivotable axially with respect to the vehicle's rear-axis whereby the vehicle is capable of performing a frontally raiseable "wheelie;"

D. Means for causing longitudinally extending relative velocity between the vehicle and the underlying simulated terrain; and means for automatically extinguishing the said vehicle to terrain relative velocity as said vehicle attains an upended-condition; and

E. Means operatively extending between the vehicle and the underlying simulated-terrain for accelerating the vehicle forward-portion vertically away from the first-station thereof, said forward-portion vertical acceleration means being remotely controllable by an apparatus operator located rearwardly of said frame.

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