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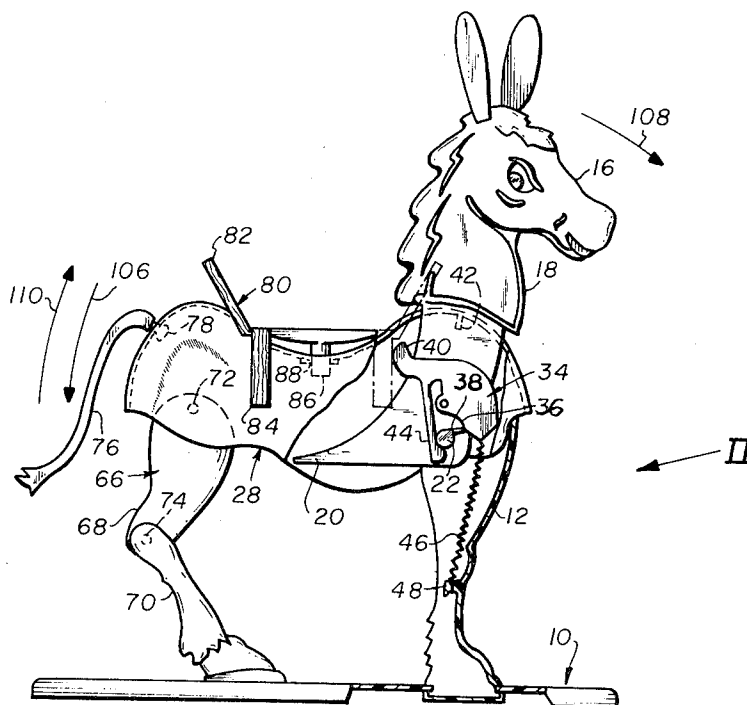
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[54] **GAME WITH BUCKING ANIMAL**  
 11 Claims, 8 Drawing Figs.

[52] U.S. Cl. .... 273/1 R,  
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 [51] Int. Cl. .... A63F 9/00  
 [50] Field of Search ..... 273/1 R,  
 179 R, 179 A, 179 B, 102.1; 124/33, 36, 7; 46/127,  
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**ABSTRACT:** The body portion of a mule figure is pivotally supported on a base member and held in a generally horizontal position by a spring-biased detent. The addition of weights to the body overcomes the force of the detent causing the unsupported body to drop. The head portion, of the mule is also pivoted to the base and is held in a latched position against the bias of a second spring. When the body drops, it releases the latch which causes the head portion to accelerate due to its spring. A kicker member on the head portion engages the body portion causing it to accelerate along with the head portion thus simulating a bucking motion which throws off the weights.



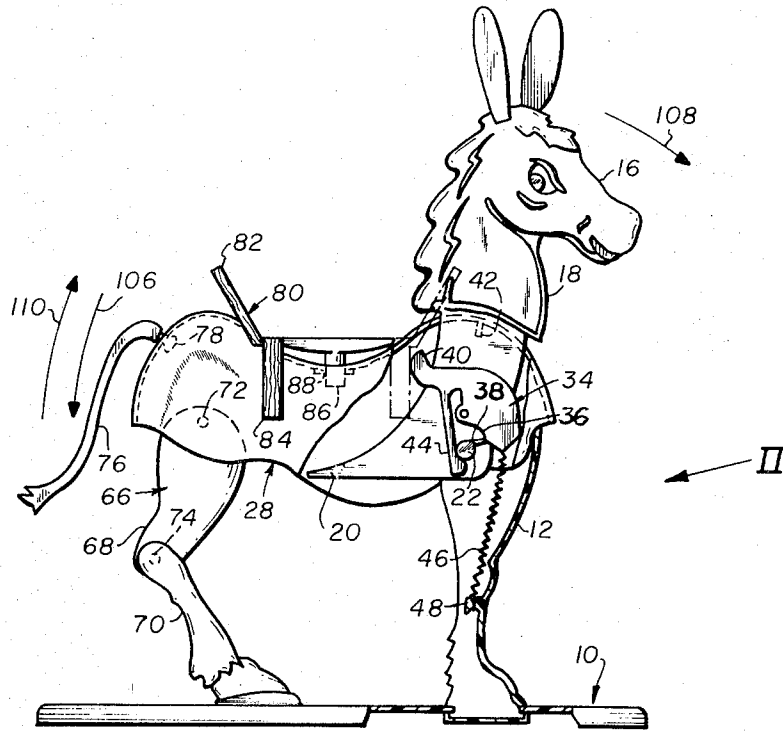


FIG. 1

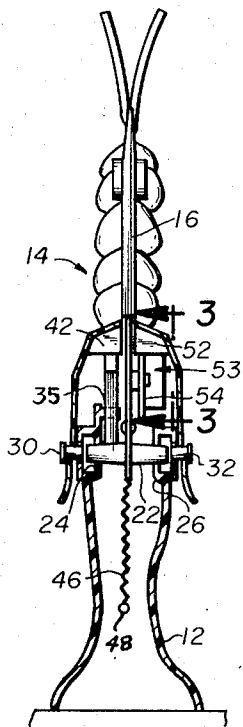


FIG. 2

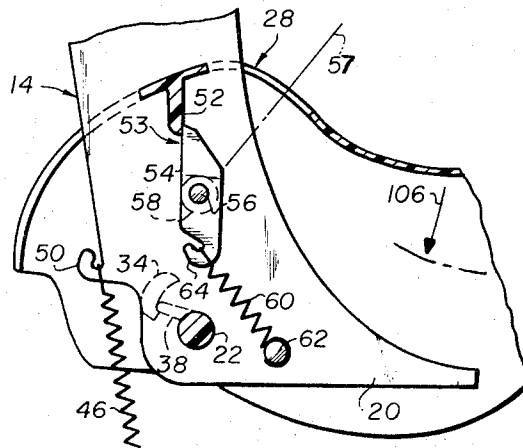


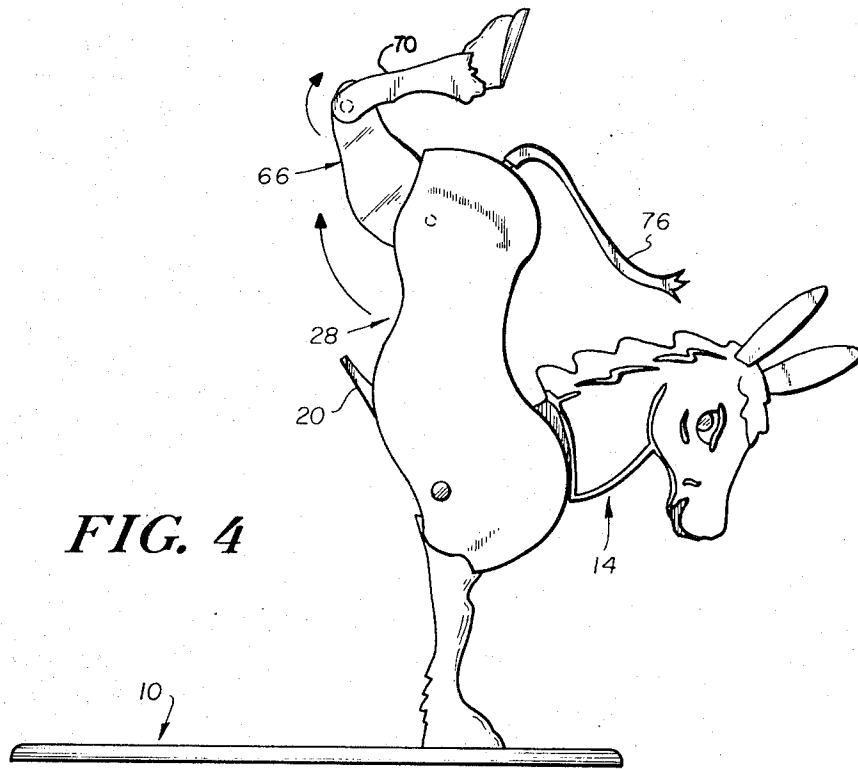
FIG. 3

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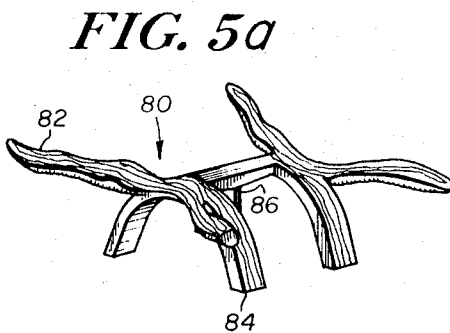
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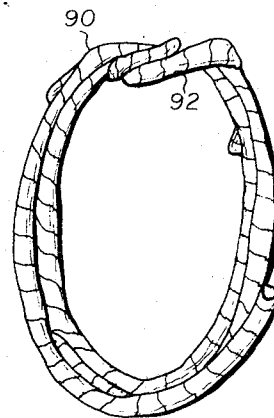
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**FIG. 4**

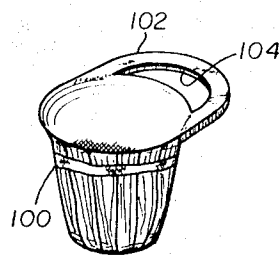
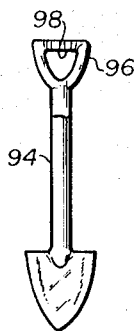


**FIG. 5a**



**FIG. 5b**

**FIG. 5c**



**FIG. 5d**

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## GAME WITH BUCKING ANIMAL

### BACKGROUND OF THE INVENTION

This invention relates to games and toys and more particularly to that class of toys simulating animals providing response to movement of certain portions of the toy. Weight responsive games or toys are well known in the Art. Such toys have had, as their operating principle the upsetting of the balance of an object, or conversely, the maintaining of the balance, as objects or weights are manipulated. After several uses by the players, the principles become familiar and much of the play value is lost. Against this background the invention described below adds a sudden operation at a random weight distribution so as to keep the interest and attention of those playing the game including the toy.

### OBJECTS OF THE INVENTION

An object of this invention is the provision of a toy figure providing a simulated lifelike action in the response to manipulation of a portion of the toy.

Yet another object of this invention is to provide a novel game in which a simulated mule reacts to overloading on an entirely random and unpredictable basis thus providing an element of suspense to the players.

Still another object of the invention is the provision of a toy having enhanced play value due to its substantially nonrepetitive mode of operation.

### SUMMARY OF THE INVENTION

In accordance with the presently preferred embodiment of the invention, which may be fabricated from plastic or metal or a combination thereof, there is provided a toy figure including a support having a body portion pivotally mounted on the support for movement between a rest position, a first position and a second position. Detent means resiliently restrains the body in the rest position. A first member is pivotally mounted on the support for movement between a latched position and an unlatched position. A resilient means biases the member to the unlatched position. releasable latch restrains the member in the latched position. The latch is operated by movement of the body from the rest position to the first position to release the first member. When the first member is released it moves to its unlatched position and in so moving a portion of the first member engages the body and moves the body from the first position to the second position. The movement of the body from the rest position to the first position may be caused by adding weights to the body to cause the detent means to be overcome.

The above and other objects, advantages and novel features of the invention will become apparent from the following description when taken in conjunction with the accompanying drawings in which:

FIG. 1 is a side elevation of the toy shown in the rest position with portions of the toy in section and other parts broken away in the interest of clarity;

FIG. 2 is a view in the direction of the arrow II in FIG. 1 with some parts in sections and other parts broken away;

FIG. 3 is a view along the line 3—3 of FIG. 2 on an enlarged scale showing the detent mechanism in the rest position;

FIG. 4 is a view similar to FIG. 1 showing the position of the moving parts after the device has been operated; and

FIGS. 5a, 5b, 5c and 5d illustrate the simulated saddle and typical illustrative weights employed with the toy.

Referring to the drawings, the presently preferred illustrative embodiment of the invention is a toy figure that includes a base 10 to which simulated forelegs 12 are secured. A combined member 14, which includes simulated head 16 neck 18 and kicker 20, is pivoted on an integral shaft 22 in journals 24, 26 provided in the upper ends of the forelegs 12. The forelegs are made as a unitary part for manufacturing convenience. A hollow, shell-like simulated body 28 is pivoted on the forelegs 12 at respective outboard pivots 30, 32 formed thereon. Latch means 34 is pivoted on a pin 35 which is formed as part of the

foreleg adjacent journal 24. Latch means 34 includes latch face 36 that engages the latched portion 38 formed integral with the shaft 22 that is part of the combined member 14. Combined member 14 may be made as unitary part by well-known molding techniques. Latch means 34 is also provided with striking surface 40 that is engaged by a portion 42 formed on the interior surface of the hollow body 28 for purposes that will be explained in detail below. Latch 34 is provided with a cam arm 44 which assists resetting of the latch 34. Spring 46 is positioned within the hollow forelegs 12 and reacts between the stud 48 thereon and a projection 50 formed on the combined member 14 for urging the combined member from the latched position shown in FIG. 1 to the unlatched position shown in FIG. 4.

Referring to FIG. 3, the body 28 is shown in solid lines in the rest position of FIG. 1. At this time abutment 52, that projects inwardly in the interior of the body 28, is in engagement with the detent means 53. Detent means 53 include detent pawl 54 pivoted on pin 56 which is integral with the combined member 14. Pawl 54 is spaced from the member 14 by a raised collar 58. Bias spring 60 reacts between the stud 62 formed on member 14 and the hooklike end 64 of pawl 54. Spring 60 biases the pawl in a counterclockwise direction about a pin 56 as viewed in FIG. 3.

Adverting to FIG. 1, the second leg portions or hind legs 66 of the simulated mule comprising upper 68 and lower 70 leg portions, are pivoted at 72 to the rear portion of the body 28. Lower leg portions 70 are jointed to the upper leg portions 68 at pivot 74. Pivots 72 and 74 are intentionally loose so that little or no impediment to the swinging of the respective members thereabout is encountered. A simulated tail 76 is loosely joined to the body, for movement relative thereto, through an aperture 78 by well-known means such as swaging.

Referring to FIG. 1 and FIG. 5a, a simulated saddle 80 having four upright hangers 82 as well as four depending portions 84 that straddle the body 28 and a central postlike member 86 is shown. When in place on the body 28 the end of post 86 projects into the interior of the hollow body through an aperture 88, as shown in FIG. 1. A number of selected objects pertinent to the character of the figure illustrated are shown in FIGS. 5a, 5b, 5c and 5d. In FIG. 5b is shown a simulated rope 90 in the form of a loop having a central aperture 92. FIG. 5c illustrates a shovel 94 having a D-shaped handle 96 that provide an aperture 98. FIG. 5d depicts a bucket 100 having a handle 102 providing an aperture 104. The respective apertures in the rope 90, shovel 94, and bucket 100 allow these items to be hung on the angled hangers 82 of the simulated saddle 80 for purposes to be described below in greater detail. While only three items normally associated with mining and miners are shown it is to be understood that use of additional weighted objects is contemplated. As for example, other objects are: but not limited thereto, a frying pan, pick axe, boots, canteens, musical instruments, hats, and the like.

For a more thorough understanding of the functioning of the device and for better appreciation of the novelty and play characteristics of the described toy a full description of operation will now be made. Referring to FIG. 1, the simulated mule is shown with the body 28 in its rest position with the combined member 14 held in the upright position. In this latched position spring 46 is tensioned. Latch 34 engages the latch portion 38 formed as part of the shaft 22 of member 14. At this time the body 28 may be considered substantially horizontal as shown in FIGS. 1 and 3. In the play of the game the first player places the saddle 80 on the body 28 (FIG. 1). The weight of the body and the saddle 80 is taken up by the detent means 53 (FIG. 3). Detent spring 60 urges pawl 54 against the body portion 52 so as to hold it nearly horizontal as shown. The rear legs 66 depend from the body and rest loosely on the base 10. It should be noted that the rear legs 66 do not provide any support for the body whatsoever. Their weight is also supported by the spring 60. After the saddle 80 is in place the players of the game take turns hanging the weights or articles of mining apparatus and mining supplies on the hangers 82

formed as part of the saddle 80. As for example, the rope 90 is passed over the hanger by the player and then carefully released. The weight of the rope is such that some slight movement of the body toward the first position occurs. Detent pawl 54 and the body portion 52 slide along one another as the weight supported by the spring 60 is increased. It will be noted that the same weight placed at a greater distance from the pivots of the body will cause more movement of the body. This fact of physics is brought home to the players with each article added. As each subsequent weighted object is placed on the hanger of the saddle the body is moved more and more in the clockwise direction toward the base as shown by the arrow 106 in FIGS. 1 and 3. More than one such weighted object may be placed on one of the hangers 82.

In order to add an element of suspense to the playing of the game the various objects may be fabricated from plastics and the like having widely varying density so that a small object may actually weigh more than a large object. As the play of the game continues with the players taking turns adding the weighted objects to the body, the pawl 54 pivots and slides along part 52 until the pawl reaches the position shown by phantom line 57. At that time pawl 54 and the portion 52 of the body are disengaged thus freeing the body from restraint and allowing it to drop rapidly toward the first position. The dropping off of the body 28 from the detent means 53 causes the body to accelerate for a short distance toward the base 10 until abutment 42 of the body engages the arm 40 of the latch 34. The sudden application of force to the latch 34 causes it to pivot and release the combined member 14. The combined member is then rapidly moved in a clockwise direction indicated by the arrow 108 in FIG. 1 under the influence of spring 46. As the combined member pivots in its journals 24 and 26 the kicker arm 20 moves upwardly toward the depending post 86 of the saddle 80. Much of the kinetic energy available in the moving combined member is transferred to the relatively stationary saddle 80 and weights thereon by engagement of the post 86 by the kicker 20 before the kicker hits the body per se causing it to move upwardly. The movement of the saddle is followed, almost instantaneously, by the engagement of kicker 20 with the interior surface of the body 28 causing the body to also accelerate. It will be noticed that since the saddle is being driven upwardly first by the kicker this insures a spectacular upheaval of the saddle and weights since only the limited mass of the saddle and associated weights need be accelerated. Subsequently the body is also accelerated in the same direction by the remaining energy of spring 46 so that the body swings to its second position, that of FIG. 4, in the direction of the arrow 110 of FIG. 1 and the loosely pivoted rear legs 66 are free to swing to the position of FIG. 4 also. The last player, who caused the "bucking" of the mule is eliminated and play is resumed amongst the remaining players until only one is left who is then the winner.

The illustrative embodiment of the invention is readily reset from this second position to the rest position by moving the combined member 14 counterclockwise from the position of FIG. 4 to the position of FIG. 1. The latch means which is pivoted on a pin 36 is urged into latching engagement with the latch portion 38 of the member 14 by the cam arm 44 that engages the shaft 22 behind the latch. This insures that the latch 36 will drop into position shown in FIG. 1 with minimum effort, a particular feature with young players. The resetting motion brings the latch into the position of FIG. 1 at the same time the body portion 52 snaps past the detent pawl 54. Upon release of the combined member it will remain in position while the weight of the body is supported by the detent means.

It will be apparent that spring 46 serves two purposes in that it provides the acceleration of the rear legs and the weights to provide the simulated bucking action at the same time it urges the head portion 16 to a definite position clockwise of its rest position indicating that it has tripped.

Random operation of the toy is achieved by virtue of the variable position of the body 28 when it is released by the person resetting the toy. The detent means 53 is capable of sup-

porting the body in an infinite number of positions between the "rest" position and the "first" position. The closer the body 28 is to the first position the smaller the total weight that can be added by the players before the mule "bucks."

While only one embodiment of the invention has been shown and described in detail it will be apparent to those skilled in the art that various changes and modifications may be made therein without departing from the spirit and scope of the invention.

What is claimed is:

1. A toy figure including a support, a body portion pivotally mounted on said support for movement between a rest position, a first position and a second position, detent means resiliently restraining said body in said rest position, a first member pivotally mounted on said support for movement between a latched position and an unlatched position, resilient means biasing said member to said unlatched position, releasable latch means for restraining said member in said latched position, said latch means being releasable by movement of said body from said rest position to said first position, said first member having a portion adapted to engage said body for urging said body toward said second position when said first member is released by operation of said latch means.

2. A toy figure according to claim 1 wherein said detent means has a sharply defined operating point allowing rapid movement of said body to said first position thereby providing release of said latch means.

3. A toy figure according to claim 2 wherein means are provided for loosely hanging a plurality of independent weights on said body, said weights cumulatively moving said body from said rest position to said first position to operate said latch means to release said first member, said resilient means rapidly accelerating said member and said body from said first position to said second position thereby said loosely hung weights are rapidly displaced.

4. A toy figure according to claim 3 wherein said latch means include a latch member pivotally mounted on said support and having a first latch portion engaging a cooperating latched portion on said first member and being further provided with a second portion for cooperation with said body for providing operation of said latch in response to movement of said body from said rest position to said first position.

5. A simulated bucking toy comprising a base, a first leg portion secured to said base, a body pivotally supported on said first leg portion for movement between a rest position, a first position and a second position, detent means resiliently restraining said body in said rest position, a combined member including a simulated head and neck pivotally supported on said first leg portion for movement between latched and unlatched positions, said combined member having a kicker portion adapted to engage said body when said member is unlatched, resilient means reacting between said combined member and said first leg portion for urging said combined member to said unlatched position, releasable latch means between said first leg portion and said combined member for restraining said combined member against the urging of said resilient means, said latch means being operable by movement of said body from said rest position to said first position to release said combined member, said kicker portion engaging said body portion and accelerating same from said first position toward said second position in response to operation of said latch means, said body portion being movable from said rest position to said first position in one direction and from said first position to said second position in the opposite direction.

6. A simulated bucking toy according to claim 5 wherein said detent means has a sharply defined operating point allowing rapid movement of said body to said first position thereby providing release of said latch means.

7. A simulated bucking toy according to claim 6 wherein means are provided for loosely hanging a plurality of independent weights on said body, said weights cumulatively moving said body from said rest position to said first position to

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operate said latch means to release said first member, said resilient means rapidly accelerating said member and said body from said first position to said second position thereby said loosely hung weights are rapidly displaced.

8. A simulated bucking toy according to claim 7 wherein said latch means include a latch member pivotally mounted on said support and having a first latch portion engaging a cooperating latched portion on said combined member and being further provided with a second portion for cooperation with said body providing operation of said latch in response to movement of said body from said rest position to said first position.

9. A simulated bucking toy according to claim 5 including second leg portions pivotally mounted on said body portions, said second leg portions resting loosely on said base during movement of said body from said rest position to said first position, said second leg portions being capable of swinging out away from said body during movement of said body from

said first position to said second position.

10. A simulated bucking toy according to claim 9 wherein said body is hollow and said weights include a hanger simulating a saddle, said saddle having a portion extending through an aperture in said body into said body for engagement by said kicker portion before said kicker portion engages said body upon release of said combined member whereby said weights are accelerated before said body so as to obtain maximum displacement of said weights from operation of said resilient means urging said combined member to said unlatched position.

11. A toy figure according to claim 3 wherein said body is hollow and said weights include a hanger, said hanger having a portion extending through an aperture in said body into said body for engagement by said first member before said first member engages said body whereby said weights are started into motion before said body.

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