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(54) **BASKETBALL TOY**

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(52) **U.S. CL.**

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(57)

**ABSTRACT**

A basketball toy includes a ball, a doll being in a shape of a human, a goal model including a ring, and a launching device being configured to launch the doll diagonally upward. first and second arm parts include first and second hands respectively. A torso has first and second holes, and an arm operation mechanism. The arm operation mechanism is configured inside the torso to operate the first and second arm parts relative to the torso. The arm operation mechanism is configured to hold the first arm part at the first movement position, and hold the second arm part at the third movement position. The arm operation mechanism is configured to render the first and second hands to be close enough to hold the ball when the first and second arm parts are at the first movement position and the third movement positions respectively.

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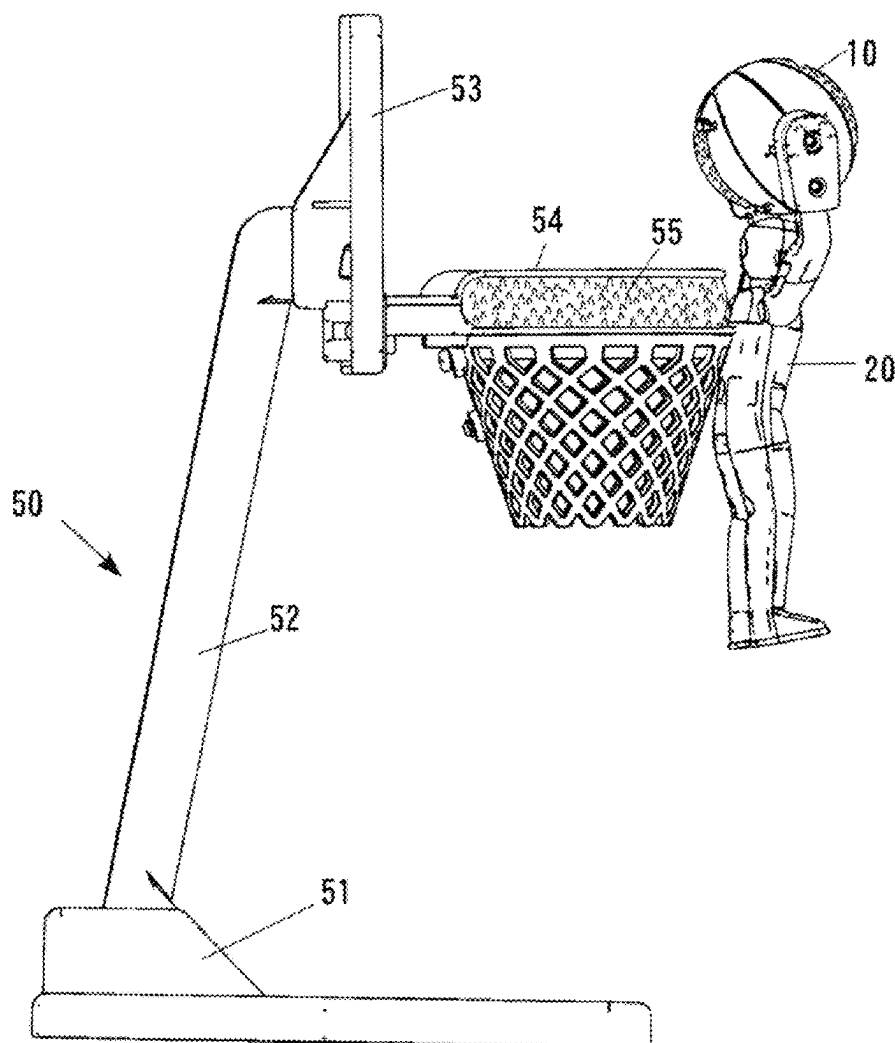
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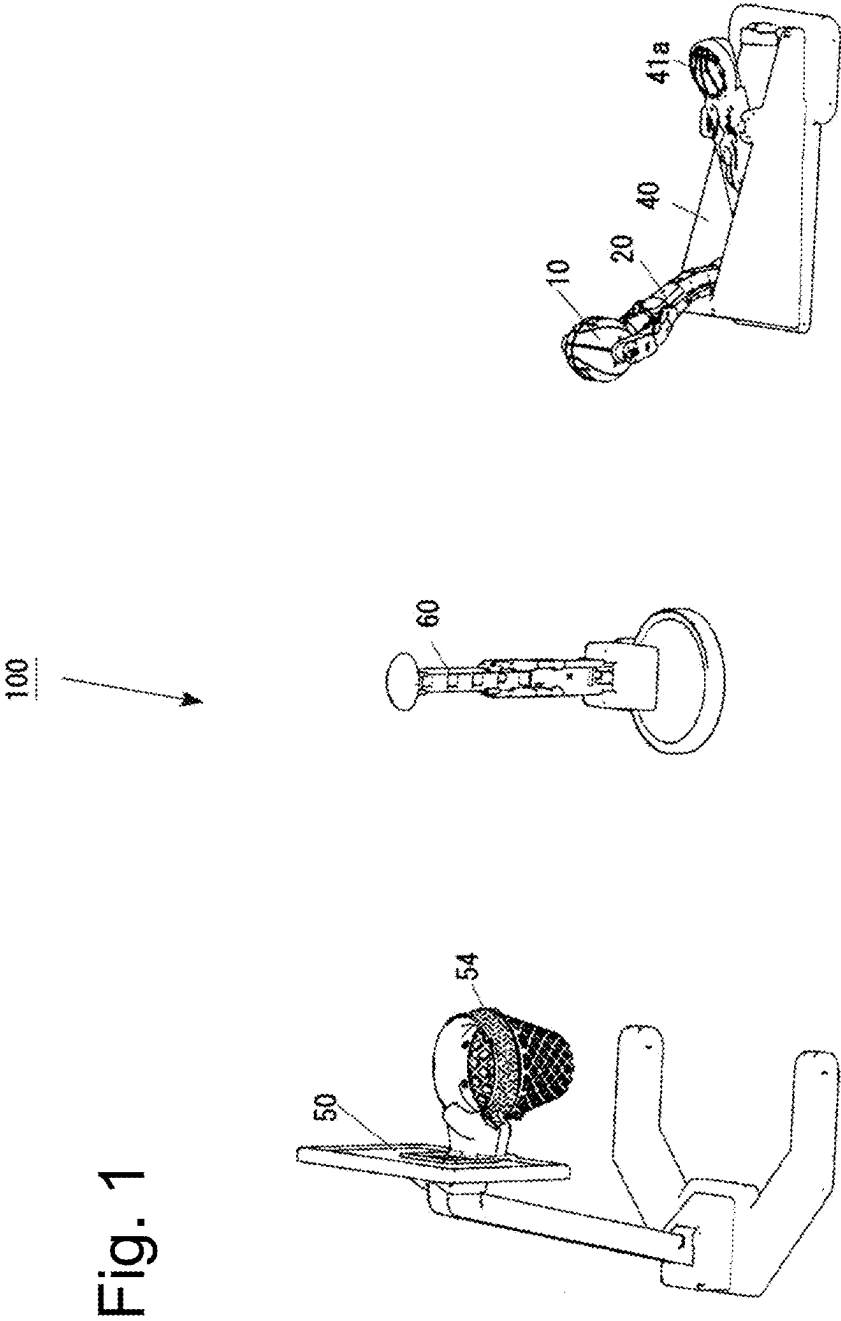


Fig. 2

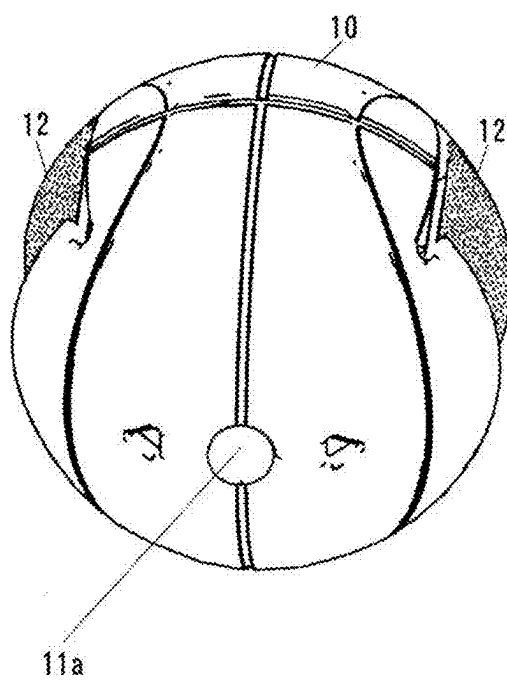


Fig. 3A

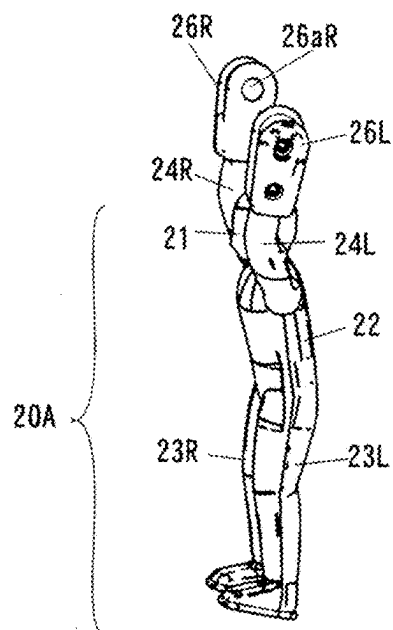


Fig. 3B

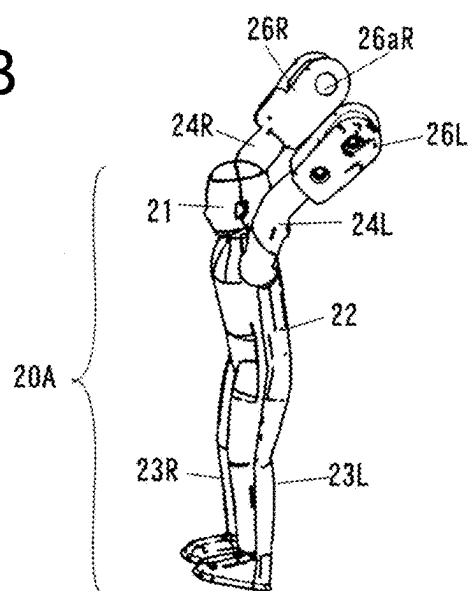


Fig. 4

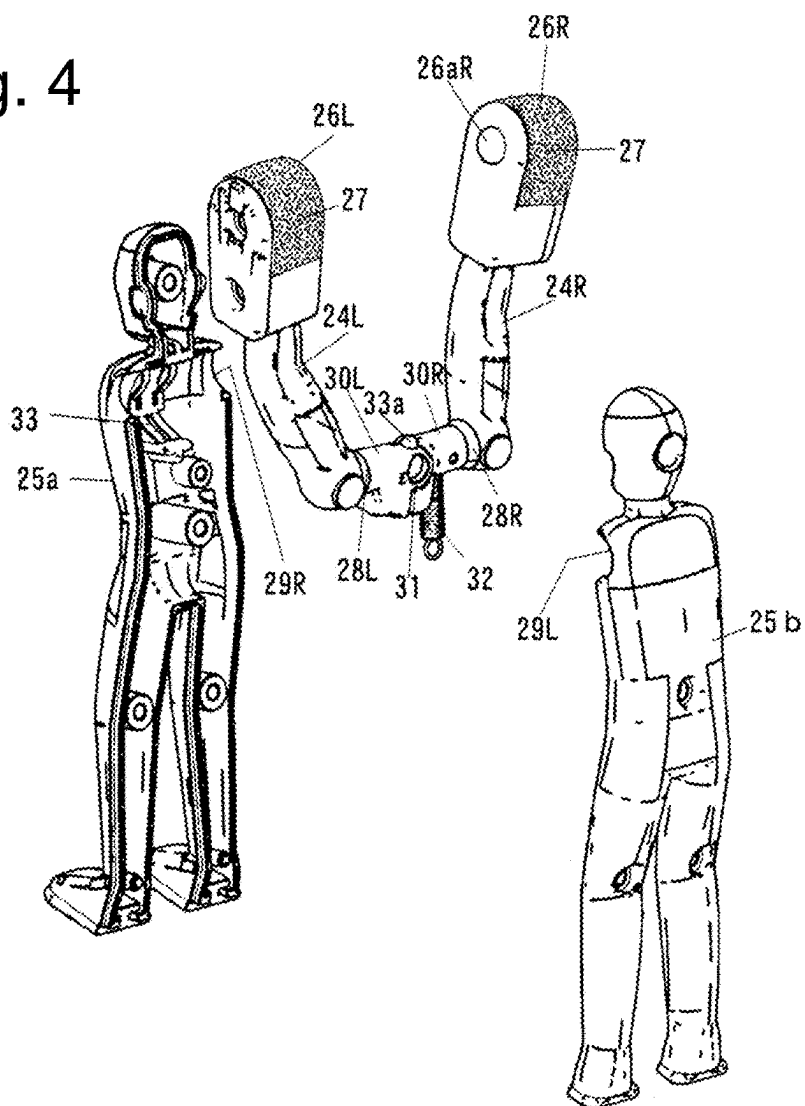


Fig. 5

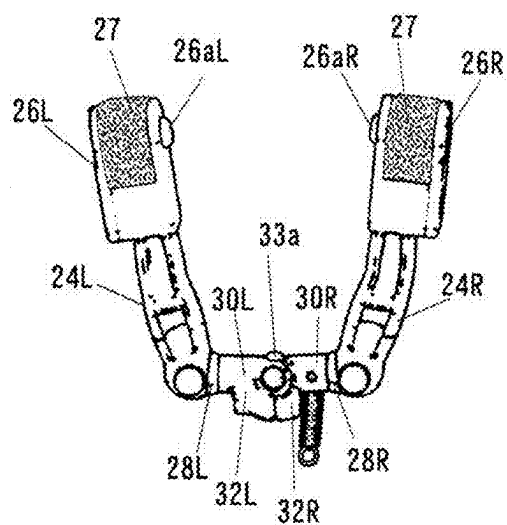


Fig. 6A

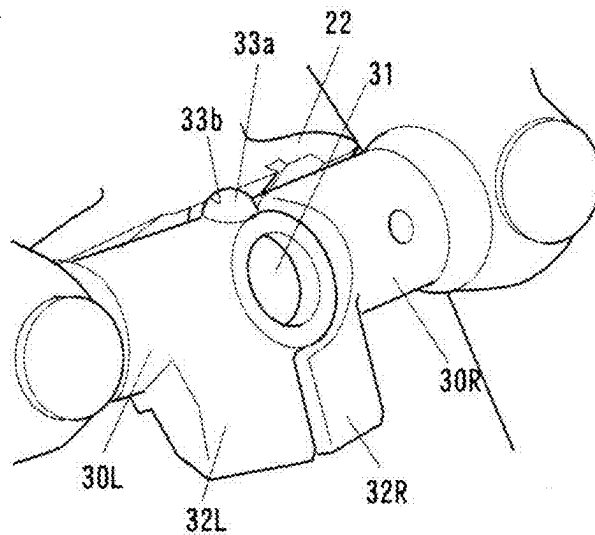


Fig. 6B

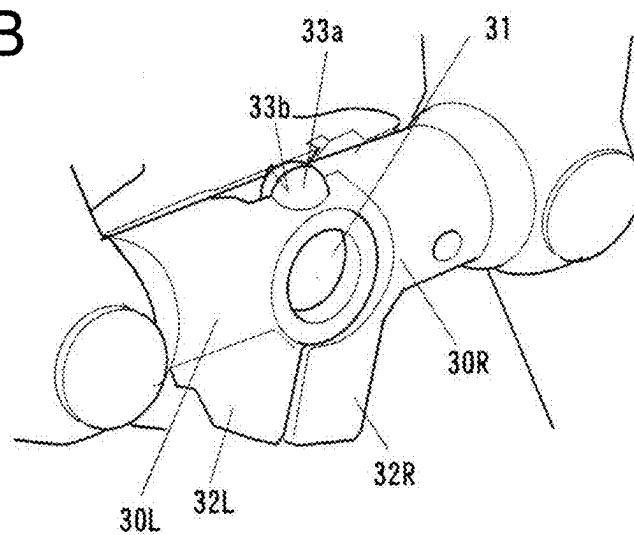


Fig. 7

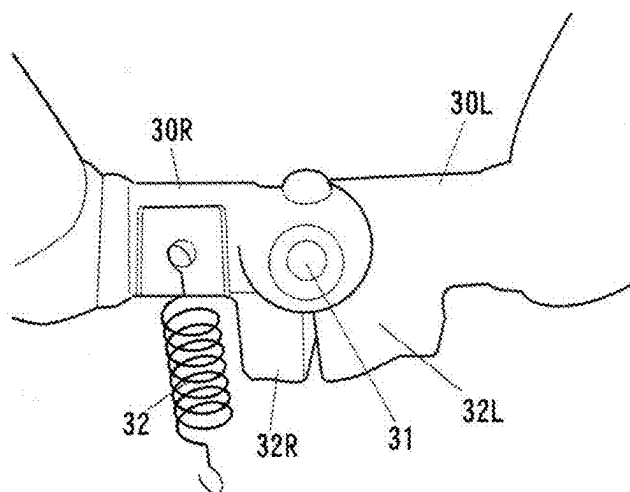




Fig. 8

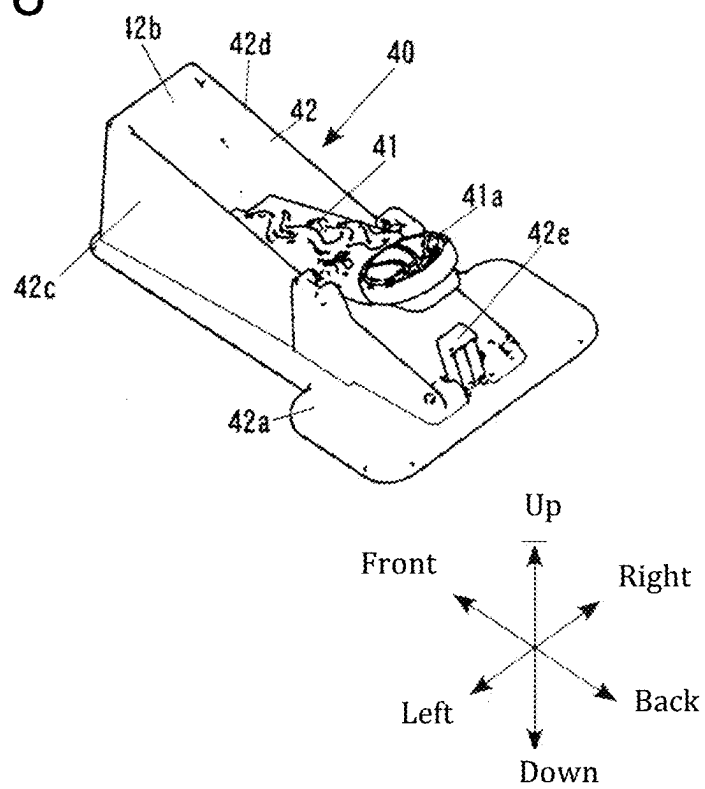


Fig. 9

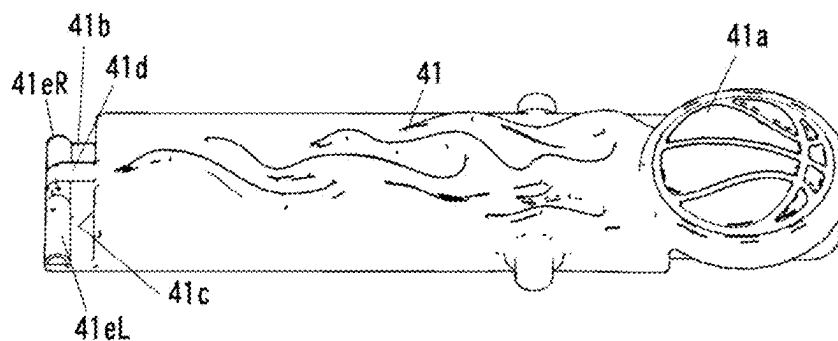


Fig. 10

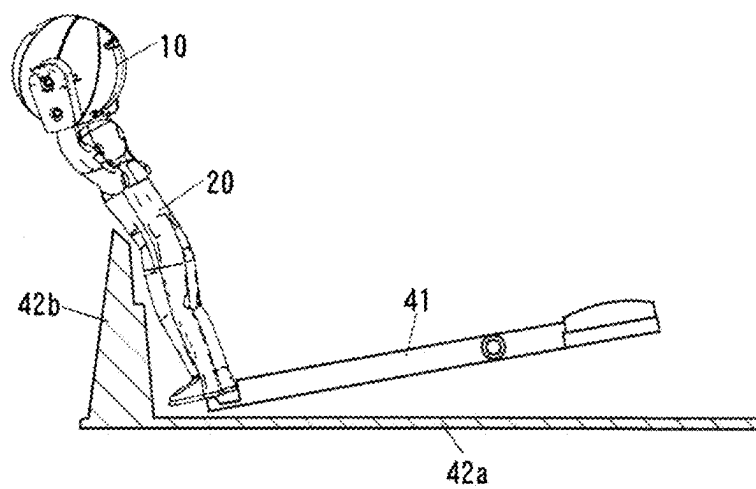


Fig. 11

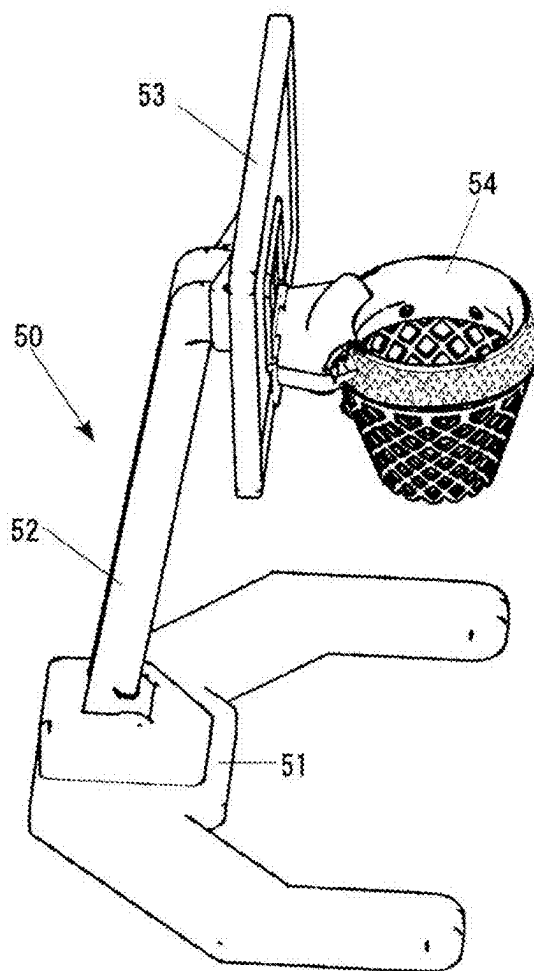


Fig. 12

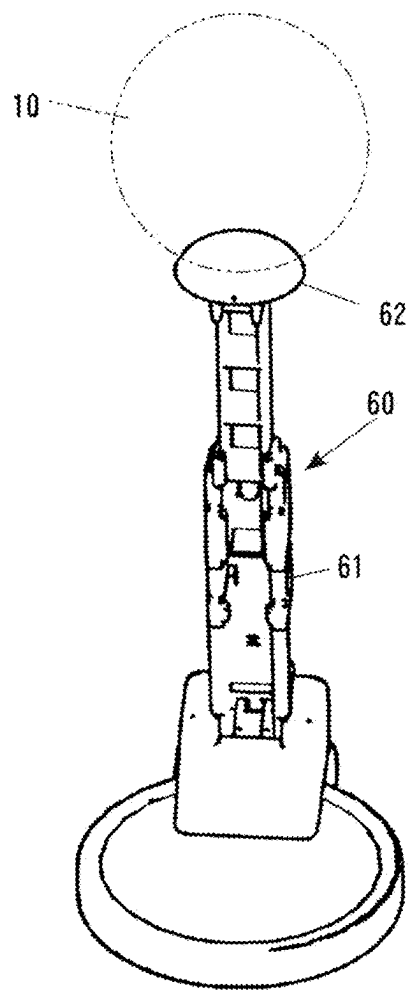


Fig. 13

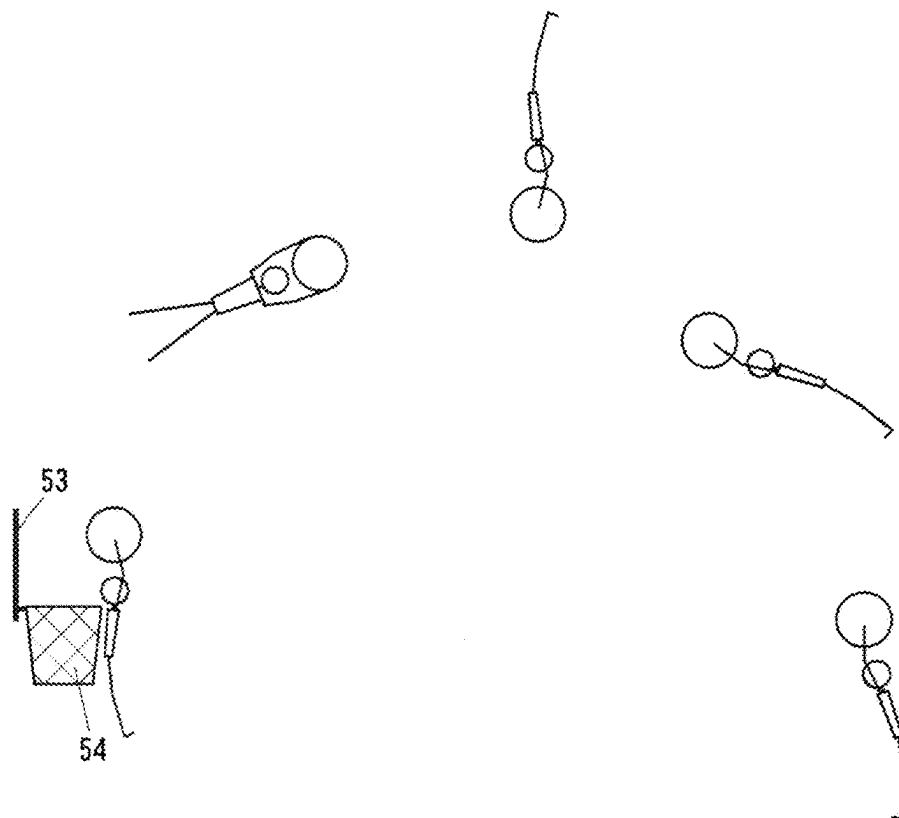


Fig. 14

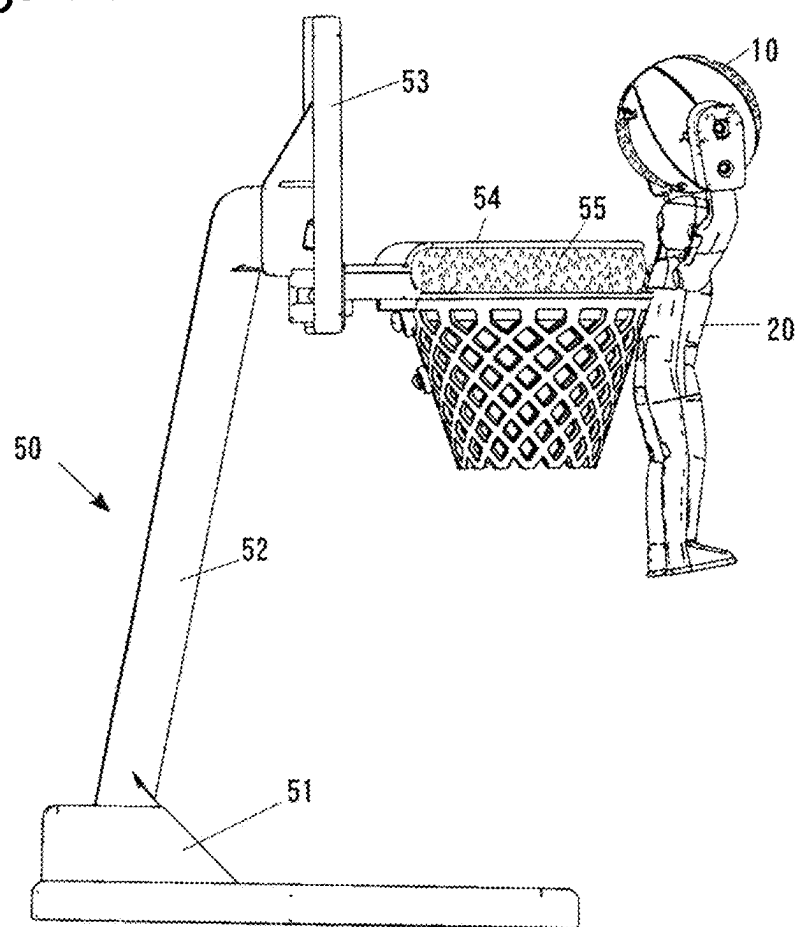


Fig. 15

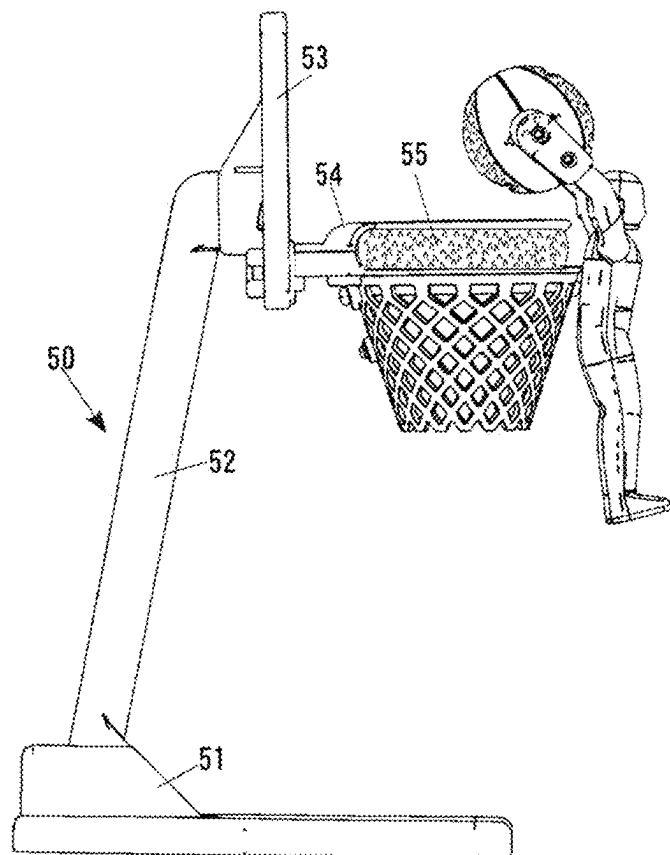


Fig. 16

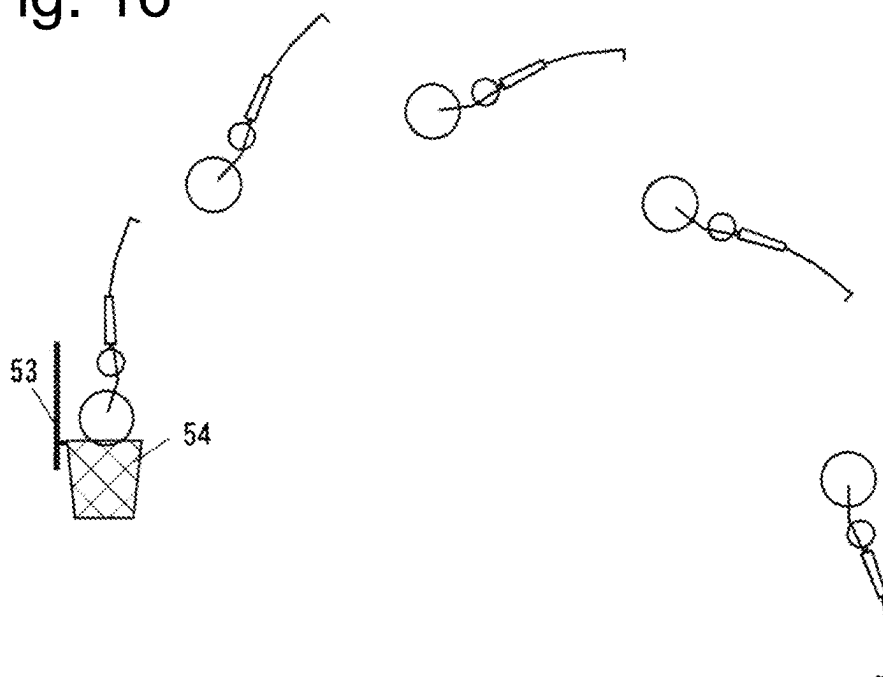
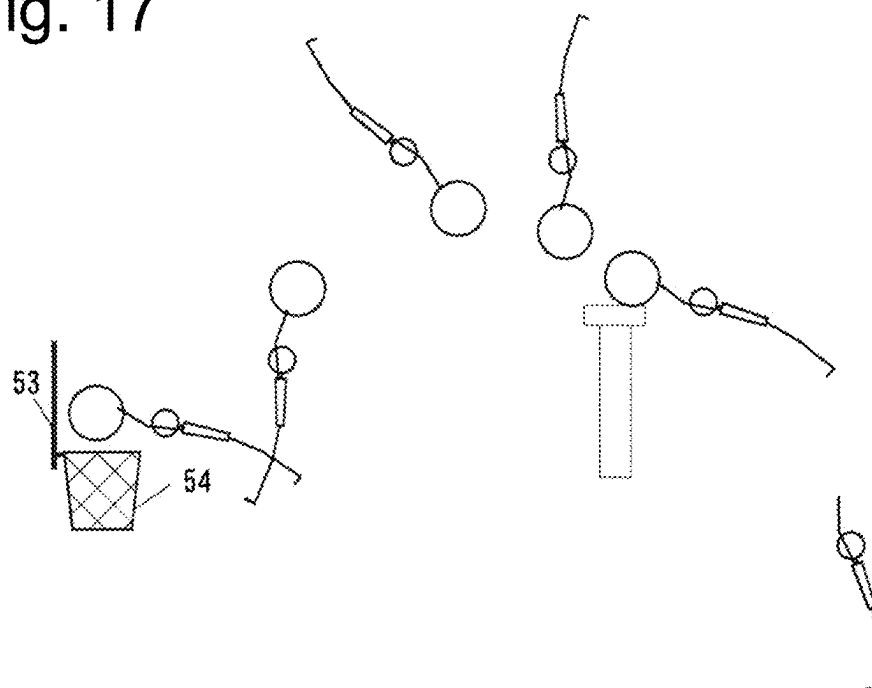




Fig. 17



**BASKETBALL TOY****CROSS-REFERENCE TO THE RELATED APPLICATION**

[0001] The present application claims priority under 35 U.S.C. 119 to Japanese Patent Application No. 2024-019197 filed on Feb. 13, 2024. The entire content of Japanese Patent Application No. 2024-019197 is incorporated herein by reference.

**BACKGROUND****Technical Field**

[0002] The present invention relates to a basketball toy.

**Background Art**

[0003] Conventionally, as a basketball toy includes a doll resembling a player, a ring disposed above the doll, a slider that vertically moves support members supporting the doll, and a jumping action generating means that moves the slider upward by pressing an operation part (Patent Document 1).

[0004] According to this basketball toy, when the player presses the operating part, the slider moves upward. If the pressing force on the operating part is appropriate, the doll is configured to put the ball into the ring.

[0005] Patent Document 1: Japanese Patent Application Publication No. 7-194838

**SUMMARY****Problems the Invention is Intended to Solve**

[0006] However, in this basketball toy, the problem was that the doll there only moves upward by operating the operating part, but the basketball toy lacked dynamism as a basketball toy capable of shooting. The present invention has been made in view of such circumstances, and aims to provide a basketball toy capable of performing dynamic shots.

**Means for Solving the Problem**

[0007] A basketball toy includes a ball, a doll being in a shape of a human, a goal model including a ring, and a launching device being configured to launch the doll diagonally upward. The doll includes a head, a torso, and first and second arm parts extending upward to above the head to hold the ball above the head. The first and second arm parts include first and second hands respectively. The torso has first and second holes, and an arm operation mechanism. The first and second arm parts include first and second shafts respectively. The first shaft is inserted in the first hole to be rotatable relative to the torso between a first movement position and a second movement position around the first shaft part as a center. The second shaft is inserted in the second hole to be rotatable relative to the torso between a third movement position and a fourth movement position around the second shaft part as a center. The arm operation mechanism is configured inside the torso to operate the first and second arm parts relative to the torso. The arm operation mechanism is configured to hold the first arm part at the first movement position, and hold the second arm part at the third movement position. The arm operation mechanism is configured to render the first and second hands to be close

enough to hold the ball when the first and second arm parts are at the first movement position and the third movement positions respectively. The arm operation mechanism is configured to allow the first and second arm parts to rotate to the second movement position and the fourth movement position respectively due to the inertia force applied on the ball when the torso hits the ring, and configured to release the ball by separating the first and second arm parts come apart when the first and second arm parts are at the first and second movement positions respectively.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0008] FIG. 1 is a perspective view of the basketball toy.

[0009] FIG. 2 is a perspective view of the ball.

[0010] FIG. 3(A) is a perspective view from the side of the doll in the first rotational position, and FIG. 3(B) is a perspective view from the side of the doll in the second rotational position.

[0011] FIG. 4 is an exploded perspective view of the doll seen from the back.

[0012] FIG. 5 is a back view showing the arms and connecting members.

[0013] FIG. 6(A) is a side perspective view from the back showing the connecting member and its surroundings in the first rotational position, and FIG. 6(B) is a side perspective view from the back showing the connecting member and its surroundings in the second rotational position.

[0014] FIG. 7 is a perspective view from the front showing the connecting member and its surroundings in the first rotational position.

[0015] FIG. 8 is a perspective view from the back of the launching device.

[0016] FIG. 9 is a perspective view of the striker plate.

[0017] FIG. 10 is a side sectional view showing the doll set in the launching device.

[0018] FIG. 11 is a perspective view of the goal model seen from the side.

[0019] FIG. 12 is a perspective view of the ball stand.

[0020] FIG. 13 is a diagram showing the flight of the doll in the first example of play.

[0021] FIG. 14 is a side view showing the shooting scene of the doll in the first example.

[0022] FIG. 15 is a side view showing the shooting scene of the doll in the first example.

[0023] FIG. 16 is a diagram showing the flight of the doll in the second example of play.

[0024] FIG. 17 is a diagram showing the flight of the doll in the third example of play.

**DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS**

[0025] Below, the basketball toy according to an embodiment of the present invention will be described with reference to the drawings.

[0026] FIG. 1 is a perspective view of the basketball toy 100.

[0027] The basketball toy 100 includes a ball 10, a doll 20 resembling a player, a launching device 40, a goal model 50, and a ball stand 60.

[0028] An overview of playing with this basketball toy 100 is as follows. First, place the ball 10 in the arms 24L and 24R (extended up to a head 21 of the doll 20 as shown in FIG. 3A). Next, set the doll 20 onto the launching device 40.

When the player operates an operating part 41a, the doll 20 is launched into the air towards the goal model 50. The doll 20 hits a ring 54. Upon impact, the doll 20 swings its arms 24L and 24R towards a backboard 53 (FIG. 11). Then, the doll 20 releases the ball 10, which falls into the ring 54. Meanwhile, after releasing the ball 10, the doll 20 falls due to its weight. Depending on how well the doll 20 hits the ring 54, the arms 24L and 24R may attach to the ring 54, causing the doll 20 to hang from the ring 54.

[0029] Next, this basketball toy 100 will be explained in detail.

#### Ball 10

[0030] FIG. 2 is a perspective view of the ball 10.

[0031] The ball 10 is generally made of plastic. However, it may also be formed from rubber or other materials.

[0032] On the outer circumference of the ball 10, there is one fitting hole 11a corresponding to each of the arms 24L and 24R of the doll 20. Each fitting hole 11a is drilled from the outer circumference of the ball 10 towards the center of the ball 10. These fitting holes 11a are designed to be fitted with fitting protrusions 26aL and 26aR of the doll 20, as described later.

[0033] Additionally, attachment parts 12, which form one part of a hook-and-loop fastener, are attached to the outer circumference of the ball 10. These attachment parts 12 are capable of attaching to attachment parts 27 of the doll 20, which is also described later.

#### Doll 20

[0034] FIGS. 3 (A), (B) show perspective views of the doll 20 from the side. FIG. 4 is an exploded perspective view of the doll 20 viewed from the back, and FIG. 5 is a back view showing the arms 24L, 24R and the connecting member.

[0035] The doll 20 is generally made of plastic.

[0036] The doll 20 is made of a doll body 20A including the head 21, a torso 22, and movable left and right leg parts 23L, 23R, and movable left and right arm parts 24L, 24R attached to the doll body 20A.

[0037] The doll body 20A is made of a front shell 25a and a rear shell 25b, which are interconnected by screws (not shown).

[0038] The arms 24L and 24R are shaped in a “<” shape, where hand parts 26L, 26R and forearms bend backwards relative to the upper arms. This configuration makes it easier for the doll 20 to perform a dunk shot.

[0039] Additionally, the arms 24L and 24R extend up to the head 21 to allowing the hand parts 26L, 26R to hold the ball 10 above the head 21.

[0040] The hand parts 26L and 26R are each shaped like an elliptical cylinder, with one end of the major axis of each ellipse connected to the corresponding forearm. One of the two end faces (flat surfaces) of each ellipse forms the palm of the doll 20. The palms of the hand parts 26L and 26R face each other.

[0041] Each palm has the fitting protrusions 26aL, 26aR that can fit into the fitting holes 11a, 11a of the ball 10. These fitting protrusions 26aL, 26aR are semi-spherical, but they could also be cylindrical. The key is that the fitting protrusions 26aL, 26aR and the fitting holes 11a, 11a of the ball 10 have complementary shapes, allowing for fitting and release.

[0042] Furthermore, the attachment parts 27, which form part of a hook-and-loop fastener, are attached to the outer peripheral surface of each hand part 26L, 26R, corresponding to the fingertip and side areas.

[0043] The axel parts 28L, 28R forming the base of the arms 24L, 24R are loosely fitted into axle holes 29L, 29R formed on the shoulders of the doll 20 by the front shell 25a and the rear shell 25b. The edges of the axle holes 29L, 29R serve as pivot support points during the rotation of the arms 24L, 24R.

[0044] The axel parts 28L and 28R extend to the center of the width of the torso 22. Extension parts 30L and 30R are mutually connected at the center of the width of the torso 22 by a shaft 31. The assembly formed by these extension parts 30L, 30R, and a shaft 31 enables the arms 24L, 24R to pivot integrally around the axel parts 28L, 28R.

[0045] Between the extension part 30R and the internal fixed part of the torso 22 (not shown), a coil spring 32 is attached. The coil spring 32 pulls the extension part 30R downward. The coil spring 32 biases towards bringing the hand parts 26L, 26R closer to each other and moving the arms 24L, 24R towards the first movement position. At the first joint of the arms 24L, 24R, a hemispherical protrusion (holding part) 33a is provided on the shaft 31 or the shaft parts, and when in the first movement position, as shown in FIG. 6(A), the protrusion 33a is in contact with an internal fixed part 33b of the torso 22 and pushes the protrusion 33a downward to engage with the fixed part 33b. The “first movement position” refers to the position of the arms 24L, 24R shown in FIG. 3(A).

[0046] In this first movement position, the arms 24L, 24R are held in place by the biasing force of the coil spring 32 with the protrusion 33a in contact with the fixed part 33b. Also, due to a certain inertia force, as shown in FIG. 6(B), the arms 24L, 24R move to the second movement position where the contact between the protrusion 33a and the fixed part 33b is released. The “second movement position” refers to the position of the arms 24L, 24R shown in FIG. 3(B).

[0047] In the second movement position, the shaft 31 is positioned at the same height as the axel parts 28L, 28R. In other words, in the second movement position, the shaft 31 is positioned on a straight line connecting the axel parts 28L, 28R. In the embodiment of the doll 20, when the shaft 31 is in this position, the distance between the hand parts 26L, 26R is maximized. Also, in the first movement position, the shaft 31 is pressed downward by the internal fixed part 33B of the torso 22, and the position where the protrusion 33a and the distance between the hand parts 26L, 26R are minimized is maintained by the coil spring 32.

[0048] When the arms 24L, 24R are in the first movement position, the distance between the hand parts 26L, 26R is small, making it difficult to hold the ball 10 in the hand parts 26L, 26R. Therefore, when holding the ball 10, the arms 24L, 24R are rotated to the second movement position to hold the ball 10, and then the arms 24L, 24R are returned to the first movement position.

[0049] FIG. 7 is a perspective view from the front showing the connector in the first operational position and its surroundings. As shown in the figure, one end of the coil spring 32 is attached to the front side of the extension part 30R. The coil spring 32 biases the arms 24L, 24R towards each other and towards the first operational position, rotating them. By moving (rotating) the arms 24L, 24R to the first operational position due to this coil spring 32, the projection 33a presses

downward against the fixed part **33b** of the torso **22**, maintaining the position set so that the distance between the arms **24L**, **24R** and the hand parts **26L**, **26R** is minimized. [0050] Additionally, protrusions **32L**, **32R** extending downward are provided on the extension parts **30L**, **30R**. These protrusions **32L**, **32R** are spaced apart in the first operational position. On the other hand, on the inner surface of the torso **22**, there is a sliding contact section **33** where the protrusions **32L**, **32R** slide when the arms **24L**, **24R** rotate from the first operational position to the second operational position. The sliding contact section **33** induces relative displacement of the extension parts **30L**, **30R** centered on the axis **31** due to the sliding contact between the protrusions **32L**, **32R** and the sliding contact section **33**. The sliding contact of the protrusions **32L**, **32R** with the sliding contact section **33** of the coil spring **32** occurs just after the projection **33a** moves away from the fixed part **33b** inside the torso **22**, and as the arms **24L**, **24R** begin to rotate from the first operational position to the second operational position, the protrusions **32L**, **32R** rotate towards the front shell **25a** and slide into the sliding contact section **33**. Due to this sliding contact between the protrusions **32L**, **32R** and the sliding contact section **33**, the distance between the hand parts **26L**, **26R** gradually increases. Therefore, when holding the ball **10** with the hand parts **26L**, **26R**, the fitting protrusion **26aL**, **26aR** are released from the fitting holes **11a**, **11a** of the ball **10** at the second operational position. When the arms **24L**, **24R** reach the second operational position, the protrusions **32L**, **32R** come into contact, preventing further separation of the hand parts **26L**, **26R**.

[0051] The extension parts **30L**, **30R**, the axis **31**, the coil spring **32**, the protrusion **33a**, the fixed part **33b**, and the protrusions **32L**, **32R** constitute the arm movement mechanism.

#### Launching Device 40

[0052] FIG. 8 is a perspective view of the launching device **40**. In the following description of the launching device **40**, directions in FIG. 8 are defined as front, back, left, right, and up.

[0053] In this embodiment, the launching device **40** is equipped with a lever mechanism to strike and propel the doll **20**.

[0054] The launching device **40** includes a long striking plate **41**. A striking plate **41** is attached to a housing **42**.

[0055] The housing **42** is elongated in the front-back direction when viewed from above, forming a rectangular shape. The housing **42** is configured with a front wall **42b**, a left wall **42c**, and a right wall **42d** erected on a base plate **42a**. The striking plate **41** is installed within the space surrounded by the front wall **42b**, left wall **42c**, and right wall **42d**.

[0056] FIG. 9 is a perspective view of the striking plate **41**.

[0057] The striking plate **41** is elongated in the front-back direction and is pivotally supported by the left wall **42c** and right wall **42d** at the midpoint along its length.

[0058] The back end of the striking plate **41** serves as the operating part **41a** pressed down by the player. On the other hand, the front end of the striking plate **41** serves as a doll placement part **41b** for placing the doll **20**.

[0059] The doll placement part **41b** is configured in a lower compartment divided by a step **41c** provided on the upper surface of the striking plate **41**. The doll **20** is placed on the doll placement part **41b** with its front facing forward

towards the launching device **40**. At this time, the heel of the doll **20** hits the step **41c**, preventing the doll **20** from shifting position. This configuration is illustrated in the side sectional view of FIG. 10.

[0060] In the center of the doll placement part **41b** in the left-right direction, a partition wall **41d** extending in the front-back direction is formed. The left and right areas separated by the partition wall **41d** constitute individual places for placing the left and right legs **23L**, **23R** of the doll **20**. On the upper surface of each place, fishcake-shaped protrusions **41eL**, **41eR** extend left and right. The protrusions **41eL**, **41eR** come into contact with the arch-like part of each foot of the doll **20** when the doll **20** is placed on the doll placement part **41b**. These protrusions **41eL**, **41eR** always exert force on the arch-like part of the doll **20**'s foot, regardless of the angle of the striking plate **41** for launching the doll **20**.

[0061] Furthermore, on the inner surface of the front wall **42b** of the housing **42**, when the doll **20** is placed on the doll placement part **41b**, the doll **20** leans against it. This causes the doll **20** to be launched diagonally upward and forward from the front of the housing **42**.

[0062] Additionally, at the back of the housing **42**, a striking plate angle limiting member **42e** is provided to pivotally restrain the movable angle of the striking plate **41**. During firing, by raising the striking plate angle limiting member **42e** and placing the operating part **41a** against the striking plate angle limiting member **42e**, it becomes possible to adjust the amount of forward rotation or twist when the doll **20** is launched at close range.

#### Goal Model 50

[0063] FIG. 11 is a perspective view of the goal model **50** seen from the side.

[0064] The goal model **50** includes the backboard **53** provided on a pillar **52** of a stand **51**, and the ring **54** is attached to the backboard **53**. Attached to the upper outer periphery of the ring **54** is an attachment part **55** that forms one side of a hook-and-loop fastener.

#### Ball Stand 60

[0065] FIG. 12 is a perspective view of the ball stand **60**.

[0066] The ball stand **60** includes a ball placement part **62** on top of a pillar **61**. The pillar **61** can be made extendable and retractable by using an accordion-style, screw-style, telescopic-style, or ratchet-style extension mechanism.

#### Gameplay

##### When Not Using Ball Stand 60

##### a. Long-Distance Launch

[0067] Attach the ball **10** to the left and right arms **24L**, **24R** extending from the head **21** of the doll **20**. Next, set the doll **20** on the launching device **40**. Then, the player forcefully strikes the operating part **41a** of the striking plate **41** to launch the doll **20**.

[0068] In this case, if successful, as shown in FIG. 13, the launched doll **20** rotates once in mid-air with half a twist. In other words, the doll **20** hits the ring **54** with its back towards it, as shown in FIG. 14. The impact stops the doll body at the ring **54**, but the ball **10** and arms **24L**, **24R** move towards the backboard **53** due to inertia, as shown in FIG. 15. As a result,

the arms **24L**, **24R** rotate from the first rotational position to the second, and the hand parts **26L**, **26R** holding the ball **10** reach the top of the ring **54**. Here, the ball **10** is released and drops into the ring **54**.

[0069] On the other hand, after releasing the ball **10**, the doll **20** falls due to its own weight. If it falls well, during the descent, the attachment parts **27** of the hand parts **26L**, **26R** of the doll **20** attach to the attachment parts **55** of the ring **54**, causing the doll **20** to hang from the ring **54**.

#### b. Short-Distance Launch

[0070] Attach the ball **10** to the left and right arms **24L**, **24R** extending from the head **21** of the doll **20**. Next, set the doll **20** on the launching device **40**. Then, the player lightly strikes the operating part **41a** of the striking plate **41** to launch the doll **20**.

[0071] In this case, for example, as shown in FIG. 16, when the doll **20** rotates half a turn in mid-air, it enters the ring **54** headfirst from the head **21**. If successful, the ball **10** or the arms **24L**, **24R** hit the ring **54**, and due to the inertia acting on the doll body **20A**, the arms **24L**, **24R** rotate to the second rotational position, releasing the ball **10**. Afterward, the doll **20** may either fall down, or it may rotate half a turn backwards on the ring **54**, with the attachment parts **27** of the hand parts **26L**, **26R** attaching to the attachment parts **55** of the ring **54**, hanging the doll **20** from the ring **54**. It's also possible for the doll **20** to remain inside the ring **54**.

#### When Using Ball Stand 60

[0072] When using ball stand **60**, do not attach the ball **10** to the arms **24L**, **24R** of the doll **20**. Set the doll **20** on the launching device **40** in this state. Ensure that the attachment parts **12** of the ball **10** faces towards the launching device **40** during setup. Then, the player forcefully strikes the operating part **41a** of the striking plate **41** to launch the doll **20**.

[0073] During flight, as shown in FIG. 17, one attachment part **27** of the hand parts **26L**, **26R** of the doll **20** hits the attachment parts **12** of the ball **10**, causing the ball **10** to adhere to one of the hand parts **26L**, **26R** of the doll **20**. In this state, the doll **20** rotates at least once, and only its hand reaches into the ring **54**. This causes the attachment parts **12** to detach from the attachment part **27**, releasing the ball **10**.

[0074] Additionally, the doll **20** continues to fall.

[0075] Thus, the manner in which the doll **20** flies and reaches the ring **54** can vary depending on factors such as the intensity of operation of the operating part **41a**, and the positioning of the doll **20**. By adjusting the position of the launching device **40**, the intensity of operation of the operating part **41a**, and the positioning of the doll **20**, various changes can be made to enjoy a game with variability.

[0076] Above, the gameplay of the basketball toy **100** in the embodiment has been described. It goes without saying that the behavior of the doll **20** can vary depending on factors such as the distance between the launching device **40** and the goal model **50**, the orientation of the launching device **40**, and the strength of operation of the striking plate **41**.

#### Effects of the Embodiment

[0077] According to the basketball toy **100** of the embodiment, the following effects can be achieved:

[0078] Specifically, with the basketball toy **100**, the doll **20** can fly through the air using the launching device **40** and score the ball **10** into the ring **54**, thus enabling a dynamic dunk shot.

[0079] Furthermore, each of the arms **24L**, **24R** is bent in a “<” shape towards the direction of rotation from the first to the second action position relative to the upper arm, making it easier for the hand parts **26L**, **26R** holding the ball **10** to operate on the ring **54**.

[0080] Moreover, the hand parts **26L**, **26R** have a thickened structure, with attachment parts **27** attached to the tip and side surfaces. The attachment parts **55** are attached to the outer periphery of the ring **54**, allowing the doll **20** to hang on the ring **54** after shooting.

[0081] Additionally, the launching device **40** is equipped with a long striking plate **41** supported by the housing **42** at the midpoint in the longitudinal direction. The operating part **41a** is provided at one end of the longitudinal direction of the striking plate **41**, and a doll placement part **41b** for placing the doll **20** is provided at the other end. This allows the doll **20** to be easily launched into the air using the lever principle.

[0082] Furthermore, the striking plate **41** is formed with the step **41c** so that the doll placement part **41b** becomes a lower section, and the protrusions **41eL**, **41eR** are formed to extend along the short direction of the striking plate **41** to contact the arch of the doll **20**. The arrangement allows the striking force to act on the arch part of the doll **20** regardless of the angle of the striking plate **41** at the time of launch.

[0083] Furthermore, the housing **42** is equipped with a front wall **42b** provided in the forward direction of the launch, a left wall **42c** provided to the left in the launch direction, and a right wall **42d** provided to the right in the launch direction. The striking plate **41** is provided within the area surrounded by the front wall **42b**, left wall **42c**, and right wall **42d**, and is configured so that the doll **20** placed there leans against the front wall **42b**, making it easier to propel the doll **20** forward and upward diagonally.

#### Variants

[0084] Thus far, embodiments of the present invention have been described, but the present invention is not limited to such embodiments and various modifications are possible.

[0085] For example, in the embodiments, a launching device **40** is used to propel the doll **20** using the lever principle, but it is also possible to propel the doll **20** using the spring biasing force.

[0086] Additionally, in the embodiments, an example was shown where the doll **20** performs a backward dunk shot, but the invention can also be applied when the doll **20** performs a forward dunk shot.

[0087] For instance, by reversing the configuration of the arms **24L**, **24R** and the arm operating mechanism to operate the doll **20** in a backward direction, the front part of the doll **20** can be positioned against the ring for performing a forward dunk shot.

[0088] Moreover, by launching the doll **20** in a backward direction, it is possible to configure the doll **20** to perform a forward dunk shot by positioning the front part of the doll **20** against the ring. It is well known that when launching a doll into the air, the rotational behavior of the doll varies depending on factors such as the center of gravity of the doll

holding the ball, the striking position, the balance of the strike from left to right, and the magnitude of the striking force.

[0089] Therefore, by reversing the configuration of the arms 24L, 24R and the arm operating mechanism and adjusting the center of gravity position of the doll holding the ball, it is possible to launch the doll 20 in a forward direction and enable a forward dunk shot.

[0090] In another embodiment, the arms 24L and 24R are moved from the first movement position to the second movement position by inertia force. At the first movement position, the arms 24L and 24R are engaged by a locking member against the urging force of a spring, and upon collision of the doll 20 with the ring 54, a locking release member is pressed, releasing the engagement of the arms 24L and 24R by the locking member, allowing the arms 24L and 24R to move to the second movement position due to the urging force of the spring.

[0091] Furthermore, in the above embodiment, the urging force of the coil spring 32 is configured to allow the protrusion 33a on the lower side of the fixed part 33b inside the torso 22 to slide in, but it may also be configured for manual sliding only at the sliding point.

[0092] Also, in the above embodiment, the protrusion 33a is pressed downward by the fixed part 33b inside the torso 22, minimizing the distance between the hand parts 26L and 26R. However, it may alternatively be configured simply to hold the minimized distance between the hand parts 26L and 26R by the contact between the fixed part 33b inside the torso 22 and the protrusion 33a, where the minimizing is achieved by the urging force of the coil spring 32.

[0093] According to the embodiments, the basketball toy can perform dynamic shots by launching the doll into the air with the launching device and putting the ball into the ring.

What is claimed is:

1. A basketball toy comprising:

- a ball,
- a doll being in a shape of a human,
- a goal model including a ring, and
- a launching device being configured to launch the doll diagonally upward,
- the doll including
  - a head,
  - a torso, and
  - first and second arm parts extending upward to above the head to hold the ball above the head, the first and second arm parts including first and second hands respectively,
- the torso has first and second holes, and an arm operation mechanism,
- the first and second arm parts include first and second shafts respectively,
  - the first shaft is inserted in the first hole to be rotatable relative to the torso between a first movement position and a second movement position around the first shaft part as a center,
  - the second shaft is inserted in the second hole to be rotatable relative to the torso between a third movement position and a fourth movement position around the second shaft part as a center,
- the arm operation mechanism is configured inside the torso to operate the first and second arm parts relative to the torso,

the arm operation mechanism is configured to hold the first arm part at the first movement position, and hold the second arm part at the third movement position,

the arm operation mechanism is configured to render the first and second hands to be close enough to hold the ball when the first and second arm parts are at the first movement position and the third movement positions respectively,

the arm operation mechanism is configured to allow the first and second arm parts to rotate to the second movement position and the fourth movement position respectively due to the inertia force applied on the ball when the torso hits the ring, and configured to release the ball by separating the first and second arm parts come apart when the first and second arm parts are at the first and second movement positions respectively.

2. The basketball toy according to claim 1 comprises:

- an interconnected body including
  - first and second extension parts extending from the first and second arm parts inside the torso,
  - a third shaft connecting the first and second extension parts at a center of the torso in a width direction thereof,
- the interconnected body being integrally rotatable with the first and second arm parts around the third shaft and being configured to separate the first and second hands by the first and second extension parts relatively moving around a center of the third shaft,
- the torso including a fixed part, and a folding joint part,
- the interconnected body further including
  - a spring urging the first and second hands closer to each other and urging both the first and second arm parts towards the first movement position,
  - a holding part engaging with the fixed part at the first movement position to maintain both the first and second hands close to each other, and
  - a sliding contact section being configured to slide against the folding joint part when the first and second arm parts rotate to the second movement position in order to relatively move the first and second extension parts around the center of the third shaft.

3. The basketball toy according to claim 1, wherein

- the first and second arm parts include first and second forearms respectively,
- the first forearm and the first hand form a "<" shape extending in a direction from the first movement position to the second movement position, and
- the second forearm and the second hand form a "<" shape extending in a direction from the first movement position to the second movement position.

4. The basketball toy according to claim 1, wherein

- the ball includes, on an outer surface thereof, first and second fitting holes, where the first fitting hole is configured opposite to the second fitting hole across a center of the ball,
- the first and second hands include first and second surfaces respectively and first and second fitting projections respectively,
- the first and second surface are flat and configured to contact the ball, and
- the first and second fitting projections are inserted into the first and second fitting holes respectively when the ball is held by the first and second hands.

5. The basketball toy according to claim 4, wherein the goal includes a first attachment part being configured on an outer peripheral surface of the ring, and a second attachment part, and a third attachment part, the first hand has an elliptical cylinder shape, the second hand has the elliptical cylinder shape, a first end of the elliptical cylinder shape of the first hand in a longitudinal direction is connected to the first forearm part, a second end of the elliptical cylinder shape of the second hand in a longitudinal direction is connected to the second forearm part, the second attachment part is configured on the first surface of the first hand, the third attachment part is configured on the second surface of the second hand, the second and the third attachment parts are attachable to the first attachment part.

6. The basketball toy according to claim 1, further comprising a housing, wherein the launching device includes a long striking plate, and is configured to launch the doll using a principle of leverage the long striking plate includes an intermediate portion in a longitudinal direction, and operating section,

the operating section is configured at one end of the longitudinal direction of the striking plate, and the doll placement section is configured at the other end of the longitudinal direction of the striking plate.

7. The basketball toy according to claim 6, wherein the launching device includes a step on an upper surface of the striking plate, the step dividing the doll placement section to an upper part and a lower part, the doll placement section is formed in the lower part of the step, the doll includes a foot including an arch, the striking plate includes a protrusion that corresponds to the arch, and the protrusion is elongated in a short direction of the striking plate.

8. The basketball toy according to claim 7, wherein the housing includes a front wall being configured in front of the launching direction of the doll, a left wall provided to left of the launching direction, and a right wall provided to right of the launching direction, the striking plate is configured in a space surrounded by the front wall, the left wall, and the right wall, and the doll placement section is configured so that the doll leans against the front wall.

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