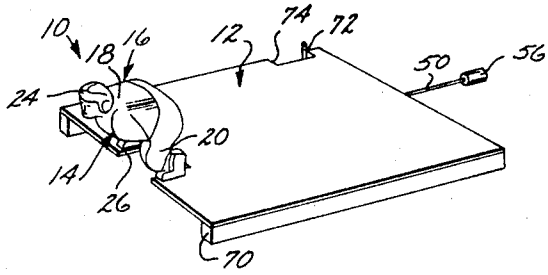
Sept. 20, 1966 H. F. BERRY 3,273,282

FOOTBALL PASSING TOY

Filed Aug. 17, 1964

FIG. 1



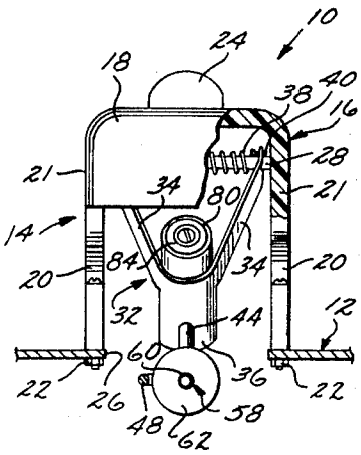


FIG. 2

FIG. 3

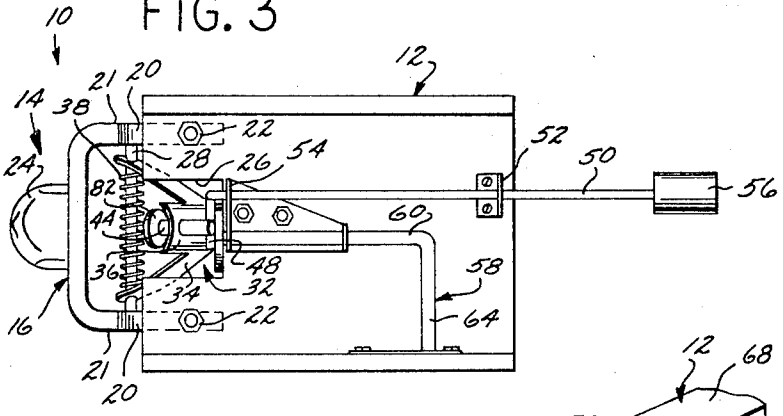
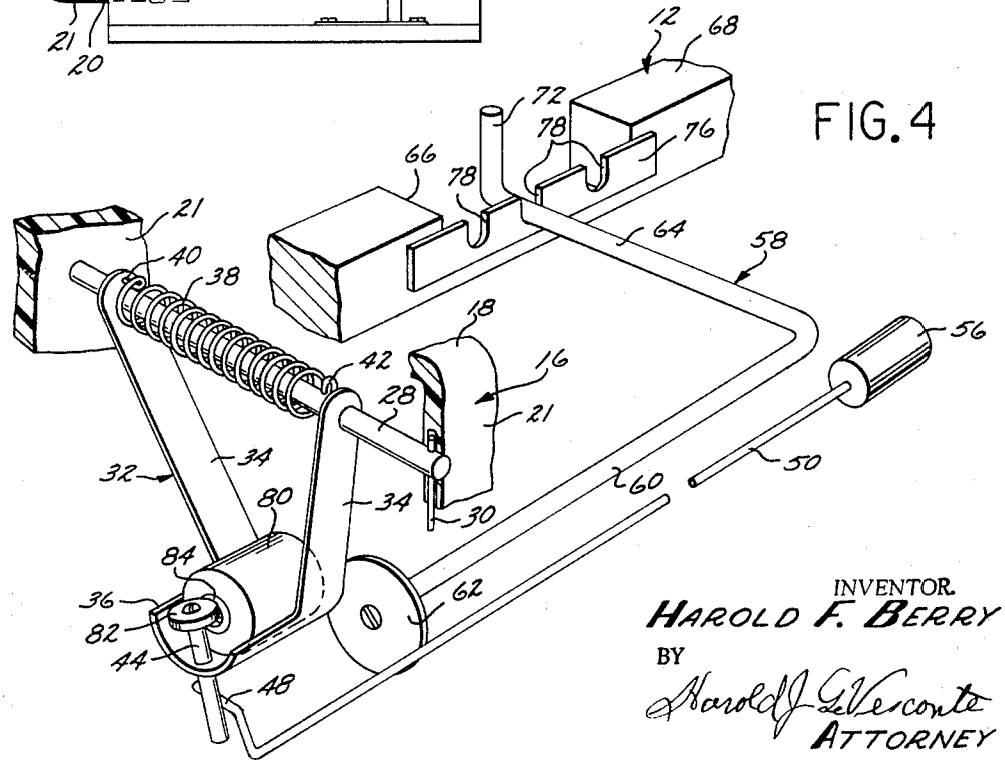


FIG. 4



INVENTOR.
HAROLD F. BERRY
BY
Harold J. LeVesconte
ATTORNEY

United States Patent Office 3,273,282 Patented Sept. 20, 1966

3,273,282

FOOTBALL PASSING TOY

Harold F. Berry, 17448 Hemmingway St., Northridge, Calif.

Filed Aug. 17, 1964, Ser. No. 390,120
12 Claims. (Cl. 46—241)

This invention relates generally to toys and particularly to a novel spring action toy which simulates a football center player passing a football to a backfield player.

Among the types of toys which most intrigue children over a wide range of ages are action toys, that is toys which a child may manipulate in some fashion to produce a particular movement or action in the toy. Particularly intriguing are those toys of this type which simulate some action performed by an adult. For example, a toy action simulating a person engaged in some sport is highly fascinating to many children. In addition to their amusement value, action toys of this character often possess educational benefits for the child and tend to improve his dexterity and coordination.

A general object of this invention is to provide a novel action toy of the class described.

A more specific object of the invention is to provide an action toy which simulates a football center player passing a football to a backfield player.

A further object of the invention is to provide a simulated football passing toy of the character described which is uniquely constructed to provide certain realistic body movements of the simulated football center player.

Yet a further object of the invention is to provide a football passing toy of the character described which is adjustable to alter the trajectory of the simulated football.

Other objects of the invention are concerned with providing a toy of the character described which is relatively simple in construction, economical to manufacture, rugged, easy to use, and otherwise ideally suited to its intended purposes.

With the foregoing objects in view, together with such additional objects and advantages as may subsequently appear, the invention resides in the parts, and in the construction, combination and arrangement of parts described, by way of example, in the following specification of a presently preferred embodiment of the invention, reference being had to the accompanying drawings which from a part of said specification and in which drawings:

FIG. 1 is a perspective view of the present toy;

FIG. 2 is an enlarged rear elevation, partially sectioned, of the action figure embodied in the toy of FIG. 1;

FIG. 3 is an enlarged plan view of the under side of the toy in FIG. 1; and

FIG. 4 is an enlarged perspective view of certain operating mechanism of the toy in FIG. 1.

Referring to FIG. 1, the present spring action toy **10** comprises a supporting base **12** simulating a portion of a football field. Mounted on the supporting base, adjacent one edge thereof, is an action figure **14** simulating a football center player in the crouching position normally occupied by such a player when he is about to pass a football rearwardly between his legs to a backfield player.

As shown best in FIGS. 2 and 3, the action figure **14** comprises a body **16** which may be formed of molded plastic, for example. This body is a hollow shell including a generally horizontal torso portion **18** simulating the crouched torso of a football center player and side members **20** extending downwardly from the side walls **21** of the torso portion **18** to simulate the legs of the player. Legs **20** are secured to the supporting base **12** in any convenient way, such as by fastening means **22**.

Extending from the forward end of the torso portion **18** is a simulated head **24**. For reasons which will appear presently, the supporting base **12** has a notch **26** in the region directly below the body **16**.

Extending horizontally across the inside of the torso portion **18** of action figure **14**, adjacent the forward or shoulder end of the torso portion, is a shaft **28**. The ends of the shaft fit within inwardly opening bores in the downwardly directed side walls **21** of the torso portion. Preferably, these bores do not extend completely through the thickness of the side walls **21**, so that the ends of the shaft and the bores will be hidden from view when the body is view from the outside. The shaft **28** is restrained against rotation relative to the body **16** in any convenient way, such as by a crosspin **30** fitted in aligned bores in the shaft and body. Rotatably mounted on the shaft **28**, for fore and aft swinging movement relative to the body **16**, is a cradle structure **32** which is intended to simulate the arms and hands of a football center player. To this end, the structure **32** could conceivably be shaped in the manner of a football player's arms and hands. For convenience, however, the cradle structure **32** has been illustrated as comprising a simple metal form which may be fabricated from sheet metal, for example, including a pair of arms **34** integrally joined at one end by a generally semicylindrical cradle **36**. Arms **34** diverge toward their outer extremities and are apertured at these extremities to rotatably receive the shaft **28**. The cradle structure **32** is thus rotatable on the shaft **28** in a fore and aft direction relative to the body **16** of the action figure **14**. Encircling the shaft **28** between the arms **34** is a coil spring **38**. One end **40** of the spring is fixed to one arm **34** of the structure **32** at a position laterally offset from the rotation axis of the structure, as by engaging in a bore in the arm. The other end **42** of the spring **38** is fixed in a radial bore in the shaft **28**. It is apparent, therefore, that the spring **38** acts as a torsion spring which urges the cradle structure **32** in a rearward direction of rotation relative to the body **16**.

Fixed in the forward end of the semicylindrical cradle **36** is a shoulder member or pin **44**. The lower end of this pin, as the latter is viewed in FIG. 4, extends below the cradle **36** for engagement with a transverse arm **48** on one extremity of an actuating rod **50**. Actuating rod **50** is supported, by brackets **52** and **54** fixed to the other side of the base **12**, for axial movement in the endwise direction of the base and rotation of the rod about its longitudinal axis. The rod is rotatable between the extended position of FIG. 4, wherein the transverse arm **48** on the rod is disposed in the path of swinging movement of the cradle pin **44**, and a retracted position, wherein the arm **48** is disposed out of the path of swinging movement of the cradle pin. The rear end of the actuating rod extends a distance beyond the rear edge of the supporting base **12** and mounts a handle **56** which is adapted to be grasped with the fingers.

Also mounted on the under side of the supporting base **12** is an adjustable stop **58**. This stop comprises a generally L-shaped rod, one arm **60** of which is slidably and rotatably supported in the bracket **54** for rotation and axial movement on an axis parallel to the actuating rod **50**. Fixed to the forward end of the arm **60**, forwardly of the bracket **54**, is a disk-like stop shoulder **62**. Shoulder **62** is disposed for engagement by the cradle pin **44** to limit rearward swinging of the cradle structure **32**. As may be best observed in FIG. 2, the stop shoulder **62** projects upwardly through the notch **26** in the supporting base **12**. Stop **58** includes a right angle arm **64** which extends laterally toward one side edge of the supporting base **12** into a notch **66** cut into a supporting rail **68** mounted along the underside of the base. A similar rail **70** is

mounted along the opposite edge of the supporting base. The outer extremity of the stop arm **64** is bent upwardly to provide a finger grip **72** which projects somewhat above the upper surface of the supporting base **12**, through a notch **74** in the adjacent side edge of the base. Fixed to the inner surface of the rail **68**, and extending across the rail notch **66**, is an indexing bar **76** having a series of upwardly opening slots **78** in its upper edge for selectively receiving the stop arm **64**. It is apparent that the axial position of the stop shoulder **62** may be adjusted, in the fore and aft direction of the supporting base **12**, by rotating the stop arm **64** upwardly to disengage the arm from the slot **78** in which it is currently positioned, axially moving the stop **58** to align the stop arm **64** with another slot **78**, and then rotating the arm **64** downwardly into the aligned slot.

Cradle **36** of the rotary cradle structure **32** is adapted to hold a member **80** simulating a football. Ball **80** is releasably retained in the cradle **36** by the magnetic attraction between a permanent magnet **82** axially mounted within the ball and a magnetically permeable disk **84** fixed to the upper end of the cradle pin **44**.

In operation of the toy, the ball **80** is positioned in the cradle **36**. The actuating rod **50** is then rotated to its retracted position and moved rearwardly to a position wherein the transverse arm **48** on the rod is disposed to the rear of the cradle pin **44**. Thereafter, the rod is rotated to its extended position and pushed forwardly. During this forward movement of the actuating rod, the rod arm **48** engages the cradle pin **44** to rotate the cradle structure **32** forwardly relative to the action figure **14**. During this forward rotation of the cradle structure, the spring **38** is tensioned, thereby creating a spring force on the cradle structure **32** tending to rotate the latter to the rear. The cradle structure is released for such rearward rotation by rotating the actuating rod **50** to its retracted position. When the cradle structure **32** swings to the rear under the action of the spring **38**, the cradle pin **44** eventually engages the stop shoulder **62**, thereby abruptly arresting the rearward movement of the structure. At this point, the momentum acquired by the ball **80** during the rearward swing of the structure causes the ball to be hurled rearwardly from the action figure **14** in a manner simulating a football center passing a football to a backfield player. Adjustment of the stop **58** in the manner explained earlier is effective to alter the angle of the cradle structure **32** when the cradle pin **44** engages the stop shoulder **62**. This, in turn, alters the trajectory followed by the ball **80** when the latter is hurled rearwardly from the cradle structure. For example, forward adjustment of the stop **58** causes the ball **80** to follow a relatively low flat trajectory. Rearward adjustment of the stop, on the other hand, causes the ball **80** to follow a higher, arching trajectory.

While in the foregoing specification there has been disclosed a presently preferred embodiment of the invention, the invention is not to be deemed to be limited to the precise details of construction thus disclosed by way of example and it will be understood that the invention includes as well all such changes and modifications in the parts and in the construction, combination and arrangement of parts as shall come within the purview of the appended claims.

I claim:

1. In a toy to be used in conjunction with a member simulating a ball, the combination comprising:

a supporting base,

an action figure mounted on said base including a simulated human body with arm means mounted for movement in the fore and aft direction of the body, and a spring operatively connected between said body and arm means for urging said arm means in one of said directions relative to the body,

stop means on said base independent of both the spring and the actuating means for abruptly arresting movement of said arm means in the direction of movement derived from said spring,

manually operated actuating means on said base releasably engageable with said arm means operable both to urge said arm means in the direction opposing the bias of said spring and to release said arm means to the bias of said spring whereby the latter is propelled in said one direction by said spring, and

means on said arm means for releasably holding said simulated ball member in such manner that the latter is hurled in said one direction from the arm means when spring induced movement of the arm means in said latter direction is arrested by said stop means, thereby to simulate a person throwing a ball.

2. In a toy to be used in conjunction with a member simulating a ball, the combination comprising:

a supporting base,

an action figure mounted on said base including a simulated human body with arm means mounted for swinging movement in the fore and aft direction of the body, and a spring operatively connected between said body and arm means biased to urge said arm means in one of said directions relative to the body;

actuating means on said base releasably engageable with said arm means manually operable both to rotate said arm means for rotating the latter in the direction relative to said body opposing the bias of said spring and to release the arm means to the bias of said spring, for propulsion of said arm means in said one direction by said spring,

stop means on said base independent of both said spring and said actuating means engageable by said arm means during swinging movement of the latter in said one direction, thereby to arrest movement of the arm means in said latter direction, and

means on said arm means for releasably holding said simulated ball member in such manner that the latter is hurled in said one direction from the arm means when swinging movement of the arm means in said one direction is arrested by said stop means, thereby to simulate a person throwing a ball.

3. The subject matter of claim **2** including:

means for adjusting said stop means, thereby to alter the trajectory followed by said ball member after the latter leaves said action figure.

4. In a toy to be used in conjunction with a member simulating a football, the combination comprising:

a supporting base,

an action figure mounted on said base simulating a football center player in crouching position and including a generally horizontal torso portion and spaced legs extending downwardly from the rear of said torso portion to said base, a cradle structure pivotally mounted on the under side of said torso portion for swinging movement in a fore and aft direction of said figure to simulate arms, and a spring operatively connected between said torso portion and cradle structure biased to urge said cradle structure in the rearward direction of rotation,

actuating means on said base releasably engageable with said cradle structure manually operable to urge said cradle structure in the direction of rotation thereof opposing the bias of said spring and to release said cradle structure to the bias of said spring for propulsion thereof in a rearward direction of rotation by said spring,

stop means on said base independent of both said spring and said actuating means for abruptly arresting movement of said arms in said rearward direction of rotation, and

means on said cradle structure for releasably holding said simulated ball member in a plane passing between said legs and in such manner that said ball member is hurled rearwardly from said arms between said legs when movement of the cradle struc-

ture in said rearward direction of rotation is arrested by said stop means, thereby to simulate a football center player passing a football to a backfield player.

5. The subject matter of claim 4 including:

means for adjusting said stop means, thereby to alter trajectory followed by said simulated ball member after the latter leaves said cradle structure.

6. In a toy to be used in conjunction with a member simulating a football, the combination comprising:

a supporting base,

an action figure mounted on said base simulating a football center player in crouching position and including a generally horizontal torso portion and spaced legs extending downwardly from the rear of said torso portion to said base, a cradle structure rotatably mounted on the under side of said torso portion for fore and aft swinging movement to simulate arms, and a spring operatively connected between said torso portion and said cradle structure biased to urge said cradle structure in the rearward direction of rotation relative to said torso portion,

a manually operable actuating rod including a transverse arm,

means mounting said actuating rod on said base for axial movement of the rod in said fore and aft direction relative to said action figure between an extended position wherein said arm is disposed to engage said cradle structure for rotating said cradle structure forwardly to an infinitely variable extent against the bias of said spring by axial movement of said rod in one direction, said mounting means for said rod additionally permitting limited manual rotation of said rod between a position of initial engagement with said cradle structure and a retracted position, wherein said arm releases said cradle structure for rearward swinging movement under the action of said spring,

stop means on said base for abruptly arresting swinging movement of said cradle structure in said rearward direction of rotation, and

means on said cradle structure for releasably holding said simulated football member in a plane passing between said legs and in such manner that said simulated football member is hurled rearwardly from said cradle structure between said legs when rearward swinging movement of said structure is arrested by said stop means, thereby to simulate a football center player passing a football to a backfield player.

7. In a toy to be used in conjunction with a member simulating a football, the combination comprising:

a supporting base,

an action figure mounted on said base simulating a football center player in crouching position and including a generally horizontal torso portion with side walls and spaced legs extending downwardly from said side walls at the rear of said torso portion to said base, a shaft extending between said side walls normal to a fore and aft plane passing between said legs and fixedly mounted at its ends in said side walls, a cradle structure including arms pivotally mounted at one extremity on said shaft and connected at the other extremity by a cradle, and a spring operatively connected between said shaft and one of said arms constantly operative to urge said cradle structure in a rearward direction of rotation,

actuating means on said base releasably engageable with said cradle structure manually operable to rotate said cradle structure in a forward direction of rotation against the bias of said spring and to release said cradle structure to the bias of said spring for propulsion thereof in the rearward direction of rotation by said spring,

stop means on said base independent both of said spring and said actuating means for abruptly arresting rearward rotation of said cradle structure under the bias of said spring, and

means on said cradle structure for releasably holding said simulated football member in such manner that the latter is hurled rearwardly from said cradle when rearward swinging movement of said cradle structure is arrested by said stop means, thereby to simulate a football center player passing a football to a backfield player.

8. A toy comprising in combination:

a supporting base,

an action figure mounted on said base including a simulated human body with arm means mounted for movement in the fore and aft direction of the body, and a spring operatively connected between said body and arm means constantly operative to urge said arm means in one of said directions relative to the body,

actuating means on said base releasably engageable with said arm means both to move said arm means in the direction opposing the bias of said spring and to release said arm means to the bias of said spring for propulsion thereof in said one direction by said spring,

stop means for abruptly arresting movement of said arm means in said one direction,

a member simulating a ball, and

means on said arm means for releasably holding said simulated ball member in such manner that the latter is hurled from said arm means when movement of the arm means in said one direction is arrested by said stop means, thereby to simulate a person throwing a ball.

9. The subject matter of claim 8 wherein:

said means for releasably holding said ball member comprises cooperating magnetic means on said simulated ball member and said arm means.

10. A toy comprising:

a supporting base,

an action figure mounted on said base simulating a football center player in crouching position and including a generally horizontal torso portion and spaced legs extending downwardly from the rear of said torso portion to said base, a cradle structure pivotally mounted on the under side of said torso portion for swinging movement in the fore and aft direction of said figure to simulate arms, and a spring operatively connected between said torso portion and said cradle structure constantly operative to urge said cradle structure in the rearward direction of rotation,

actuating means on said base releasably engageable with said cradle structure manually operable both to move said cradle structure in the direction of rotation thereof opposing the bias of said spring and to release said cradle structure to the bias of said spring for propulsion thereof in the rearward direction of rotation by said spring,

stop means for abruptly arresting movement of said arms in said rearward direction of rotation,

a member simulating a football, and

means on said cradle structure for releasably holding said simulated ball member in a fore and aft plane passing between said legs and in such manner that said simulated football member is hurled rearwardly from said cradle structure between said legs when rearward swinging movement of said cradle structure is arrested by said stop means, thereby to simulate a football center player passing a football to a backfield player.

11. The subject matter of claim 10 wherein:

said last mentioned means comprises coacting magnetic means on said simulated football member and said cradle structure.

12. A toy comprising in combination:

a supporting base,

an action figure mounted on said base simulating a football center player in crouching position and including a generally horizontal torso portion with depending side walls and spaced legs extending down-

wardly from said side walls at the rear of said torso portion to said base, a shaft extending between said side walls normal to a fore and aft plane passing midway between said legs and fixedly mounted at its ends in said side walls, a cradle structure including a pair of arms pivotally mounted at their upper extremities on said shaft and connected at their lower extremities by a cradle disposed in said plane, a shoulder member depending below said cradle, and a torsion spring operatively connected between said shaft and one of said arms for urging said cradle structure in the rearward direction of rotation,

an actuating rod having a transverse arm at one end,

means mounting said actuating rod on the other side of said supporting base at the rear of said action figure for axial movement in the fore and aft direction of said figure and rotation of said rod about its longitudinal axis between an extended position wherein said actuating rod arm is disposed to engage said shoulder member for rotating said cradle structure forwardly against the action of said spring upon forward axial movement of said rod, and a retracted position wherein said actuating rod arm is disposed out of the path of swinging movement of said shoulder member, thereby to release said cradle structure for rearward swinging movement under the action of said spring,

a stop member mounted on the under side of said base in a position to engage said shoulder member during rearward swinging movement of said cradle structure, thereby to arrest said latter movement of said cradle structure,

means accessible from the upper side of said base for adjusting said stop in the fore and aft direction of said action figure,

a member simulating a football, and

means on said cradle for releasably holding said simulated football member in such manner that the latter is hurled from said cradle when rearward swinging movement of said cradle structure is arrested by said stop, thereby to simulate a football center player passing a football to a backfield player.

References Cited by the Examiner

UNITED STATES PATENTS

2,627,260	2/1953	Zimmerman.	
2,767,985	10/1956	Maxcey et al.	124—7 X

FOREIGN PATENTS

309,943	12/1955	Switzerland.

RICHARD C. PINKHAM, *Primary Examiner.*

L. J. BOVASSO, *Assistant Examiner.*