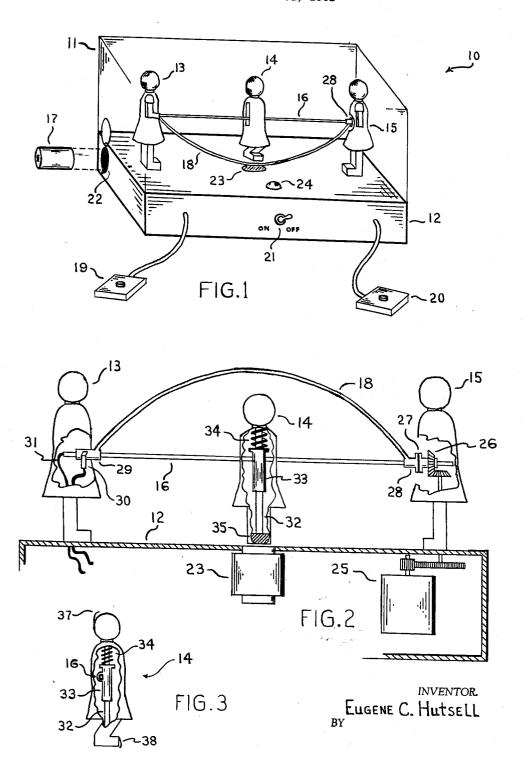
ELECTRIC JUMP-ROPE GAME

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3,130,970 ELECTRIC JUMP-ROPE GAME Eugene C. Hutsell, Butte County, Calif. (3127 S. Oregon, Seattle 8, Wash.) Filed Dec. 11, 1961, Ser. No. 158,422 2 Claims. (Cl. 273—85)

This inventions relates to competitive games and more particularly to a children's game of jump-rope.

It is an object of the present invention to provide a battery powered game in a simple and efficient manner, which can be readily operated by children, and which will provide such children a means of competition and at the same time develop coordination.

Another object of the present invention is to provide a game that is attractive in appearance and which will be entertaining to children.

Still a further object of the present invention is to provide a children's game which can be produced, packaged, and sold in large quantities at a comparatively low cost, and which can be inexpensively operated.

Still additional objects, benefits, and advantages of this invention will become evident from a study of the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a perspective view of an electric jumprope game made in accordance with the present invention.

FIGURE 2 is a front view of the electric jump-rope game shown in FIGURE 1, showing the interior of the device.

FIGURE 3 is a side view of part number 14, of the electric jump-rope game shown in FIGURE 1, showing is interior construction.

Referring now specifically to the drawing, an electric jump-rope game 10 made in accordance with the present invention is shown to include a hollow base 12 having side, bottom, and top walls. A clear plastic cover 11 that is supported upon and permanently attached to base 12, and which completely encloses and protects moving parts of game. Two hollow stationary members 13 and 15 supported upon base 12, which are outwardly constructed to resemble children engaged in turning jumprope. An arched aluminum rod 18 to simulate a rope. A vertically movable member 14 which is supported between stationary members 13 and 15 and held in a position perpendicular to base 12 by a stationary hollow tube 16. An opening 22 with pivoting closure on side of base 12 which is a conventional battery compartment into which dry cells 17 are inserted and which is not shown or described in detail.

A pushbutton control 19 to activate an electromagnet 23 for the purpose of exerting a downward attraction on a metal core 35 in lower portion of member 14. A second pushbutton control 20 to activate an electric motor 25 to drive a gear train 26 through which a friction clutch 27 causes a sleeve 28, to which one end of arched rod 18 is attached, to revolve around stationary tube 16. The other end of rod 18 is attached to a sleeve 29 which revolves around stationary tube 16 in accord with sleeve 28 due to rigidity of arched rod 18. A toggle switch 21 turns game off when not in use. A spring metal strip 30 is in constant contact with revolving sleeve 29 and completes a circuit to a miss indicator light 24 by an insulated wire 31 which through hollow tube 16 is connected to a contact 37 and a contact 38 on the top and bottom respectively of member 14 if arched rod 18 touches either contact. This circuit is conventional and therefore not shown in detail.

The internal construction of vertically movable member 14 consists of a dowel 32 which slides vertically in a hollow cylinder 33 that is supported and held in rigid position by tube 16. A compression spring 34 encircles

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the dowel 32 above cylinder 33 and acts to return member 14 to its upper limit of vertical travel when metal core 35 in lower portion of member 14 is not being attracted downward by electromagnet 23.

The operation of this device will now be readily understood. With toggle switch 21 in on position, one of the participants operates pushbutton control 20 to activate electric motor 25 and consequentially cause arched rod 18 to revolve as a jump-rope being turned. Another participant operates pushbutton control 19 intermittently to energize electromagnet 23 which will attract metal core 35 in lower portion of member 14 downward, or release it and allow compression spring 34 to return member 14 to its original position.

The longitudinal dimension of vertically movable member 14 in relation to the distance it travels vertically and the diameter of the revolution of arched rod 18 assures that the miss indicator light 24 will be illuminated if member 14 is not raised and lowered at the proper intervals and arched rod 18 is allowed to complete circuit with either contact 37 or contact 38 on member 14. In actual use, the participant operating pushbutton control 29 may also stop and start the revolution of arched rod 18 at irregular intervals to heighten competition.

Each participant then takes his turn at operating vertically movable member 14, and the participant able to operate member 14 with the least number of misses in a given length of time is the winner, as in the regular game of jump-rope.

Friction clutch 27 prevents damage to electric motor 25 if the revolution of arched rod 18 is temporarily obstructed.

Arched rod 18 is constructed of aluminum to avoid being affected by electromagnet 23.

While this invention has been described with particular reference to the construction shown in the drawing and while various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

Having thus completely and fully described the invention, what is now claimed as new and desired to be protected by Letters Patent of the United States is:

1. An electric jump-rope game comprising, in combination, a hollow base having side, bottom, and top walls, two hollow stationary members supported upon the exterior of the top wall of said hollow base, a member movable along a vertical axis supported between said stationary members, a metal core fixedly mounted in the lower portion of said vertically movable member, a compression spring in upper portion of said vertically movable member, an arched metal rod supported between said stationary members, a means of causing said arched metal rod to revolve around said vertically movable member, an electromagnet attracting said metal core downwardly, and a means of intermittently energizing said electromagnet, said compression spring acting to return the vertically movable member to its upper limit of travel when the electro-magnet is de-energized.

2. An electric jump-rope game as set forth in claim 1, wherein said electromagnet is in a position in said hollow base which is directly below and in alignment with said member movable along a vertical axis, said electromagnet attracting said metal core in said vertically movable member when said electromagnet is energized.

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