

- [54] **PROJECTOR AND CATCHER WITH VARIABLE TARGET OPENING**
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[73] Assignee: **The Raymond Lee Organization, Inc.**, New York, N.Y. ; a part interest
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- [52] **U.S. Cl.** **273/96 R; 273/105 R**
[51] **Int. Cl.** **A63b 71/00**
[58] **Field of Search** **273/96 R, 95 R, 105 R, 273/102 R**

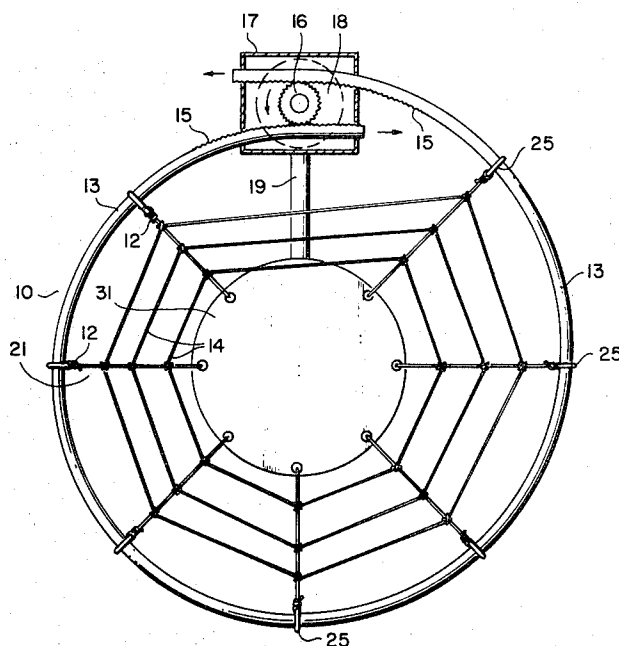
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[57] **ABSTRACT**
A game apparatus used to catch a ball. The apparatus comprises a handle axially fitted to the central end of a flexible net which may be opened or closed. A reversible electric gear motor is fastened on the split rim of the net, with a gear of the motor meshing with teeth on the periphery of the rim so as to open or close the rim of the net when the motor is controlled by a switch in the handle of the device.

4 Claims, 3 Drawing Figures



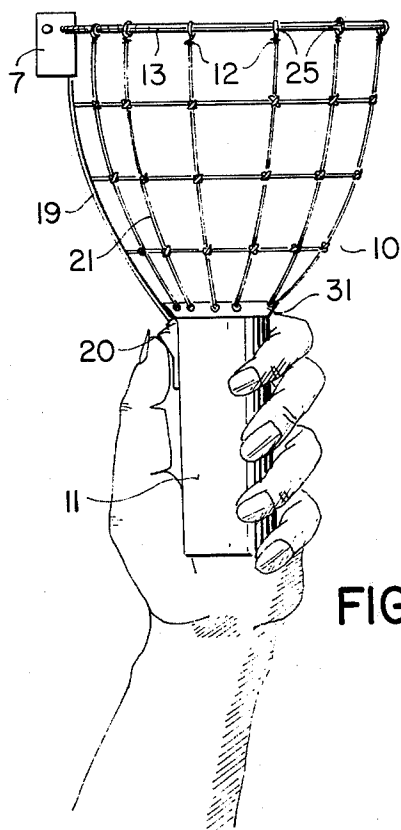


FIG. 1

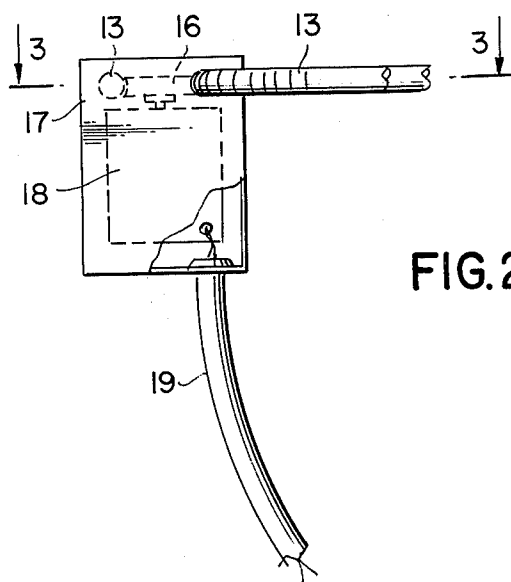
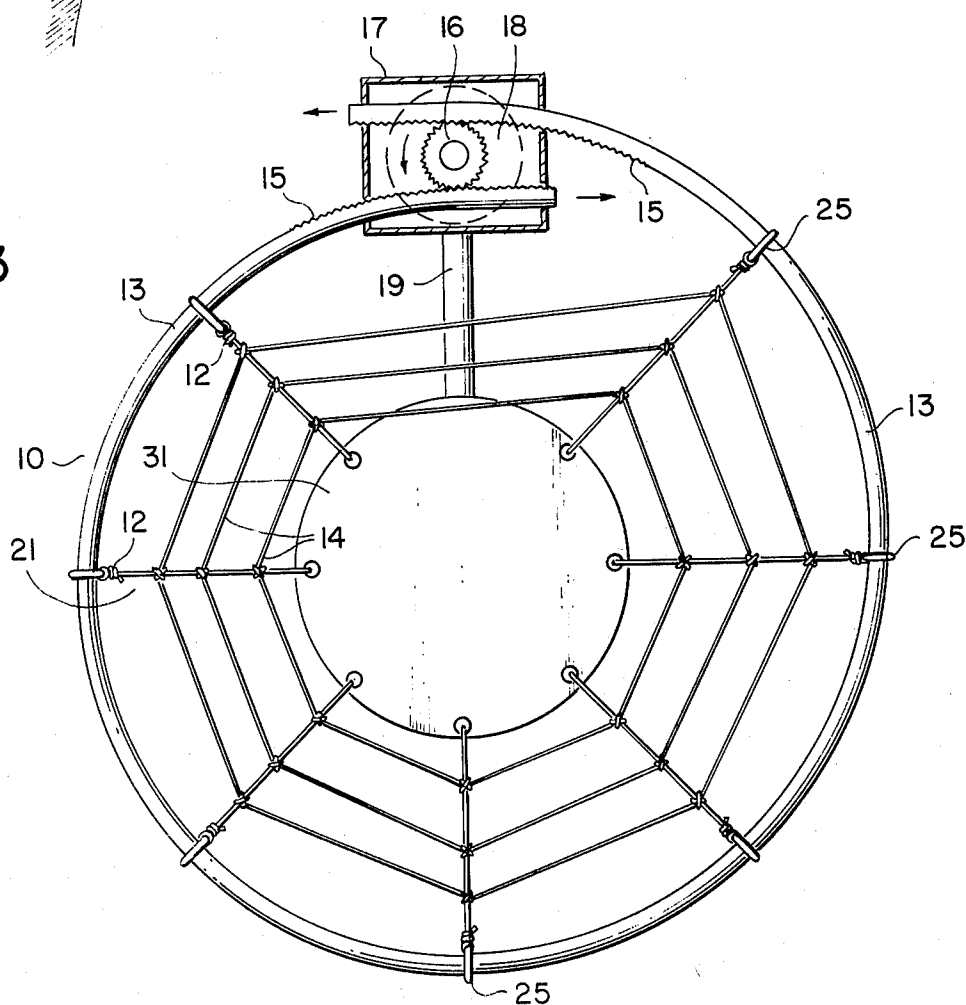


FIG. 2

FIG. 3



PROJECTOR AND CATCHER WITH VARIABLE TARGET OPENING

SUMMARY OF THE INVENTION

My invention relates to a game apparatus used to catch a ball.

The apparatus comprises a handle axially fitted to the central end of a flexible net which may be opened or closed. A reversible electric gear motor is fastened on the split rim of the net, with a gear of the motor meshing with teeth on the periphery of the rim so as to open or close the rim of the net when the motor is controlled by a switch in the handle of the device.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects and features of the invention may be understood with reference to the following detailed description of an illustrative embodiment of the invention, taken together with the accompanying drawings in which:

FIG. 1 illustrates a perspective view of the invention in use;

FIG. 2 illustrates a sectional view of the gear assembly of the invention; and

FIG. 3 illustrates a plan view of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1-3 show a game apparatus 10 for catching a ball in a closable net.

The apparatus 10 comprises a cylindrical-shaped handle 11 mounted to the bottom center section of an attached net assembly 21. The net assembly 21 is constructed of a plurality of flexible longitudinal cords 12 each fixed by a ring 25 about the top outer rim 13 of the net. A plurality of secondary lateral cords 14 transversely join longitudinal cords 12 to form the net 21, which is anchored at its bottom to a plate 31 mounted on an end of the handle section 11. The handle section 11 contains batteries (not shown) which are electrically connected through hollow support member 19 to a reversible gear motor 18 mounted in a housing 17 slidably joined to each end of the split ring 13 that forms the rim of the net 21. A three-way switch 20 is mounted externally on the handle 11 for controlling the motor 18.

Split ring 13 is formed with external teeth 15 on opposing faces of the ring surface, with the teeth 15 meshing with the output gear 16 of motor 18 so that rotation of gear 16 in one direction acts to close the rim opening, with rotation of gear 16 in the other direction acting to increase the rim opening of the net. Rings 25 about split ring 13 are of a size to freely ride over the teeth 15 of the ring as the ring is opened or closed.

In use, a player attempts to entrap a thrown ball in the net 21 by operating switch 20 to close rim 13 when a ball enters the net, before the ball bounces on plate 31 and exits the net. Points may be awarded in competitive play with penalties assessed for the ball hitting the net in the closed position of rim 13.

Since obvious changes may be made in the specific embodiment of the invention described herein, such modifications being within the spirit and scope of the invention claimed, it is indicated that all matter contained herein is intended as illustrative and not as limiting in scope.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A game apparatus for catching an object in a closable net, comprising
 - a flexible circular net mounted at its bottom to a flat plate, with the top of the net slidably mounted to rim formed as a split ring,
 - a handle member anchored at one end to said flat plate, and
 - means controllable from the handle to open or close the rim of the net by moving the ends of the split ring forming the rim.
2. The combination as recited in claim 1 in which an electric reversible motor is mounted to the split ring such that rotation of the motor acts to move the ends of the split ring relative to each other.
3. The combination as recited in claim 2 in which the split ring is formed with external teeth that mesh with a gear fastened to the drive means of the motor.
4. The combination as recited in claim 3 in which a battery to supply the motor is mounted in the handle, together with switching means in the handle to connect the battery to the motor in a polarized fashion so as to control the direction of the motor when the switching means is energized.

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