United States Patent

[11] 3,578,329

[72] Inventor **Louis Biedny**
27 Patton Drive, Somerset, N.J. 08873

[21] Appl. No. **827,629**
[22] Filed **May 26, 1969**
[45] Patented **May 11, 1971**

[54] **A WIRE LOOP AMUSEMENT GAME**
4 Claims, 4 Drawing Figs.

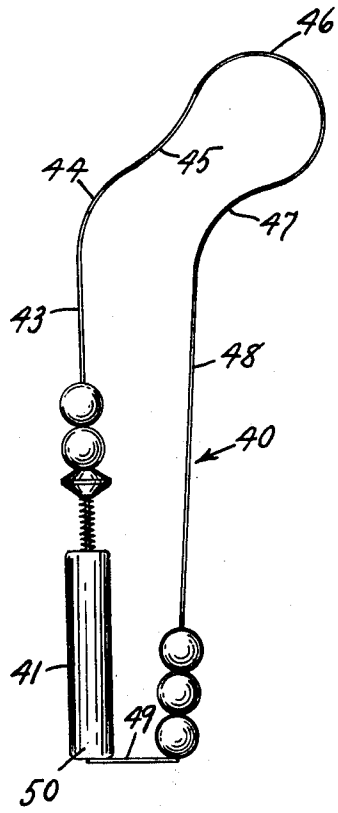
[52] **U.S. Cl.** **273/119,** 46/43
[51] **Int. Cl.** **A63f 7/00**
[50] **Field of Search** 273/1, 97, 119, 108, 118; 35/19

[56] **References Cited**
UNITED STATES PATENTS

334,475	1/1886	Shaw	273/97X
1,141,389	6/1915	Gerding	(273/108UX)
1,620,912	3/1927	Okel	273/119
2,577,309	12/1951	Carwile	35/19X
3,072,409	1/1963	Petraske	273/108X
3,204,956	9/1965	Ames	273/1

Primary Examiner—Richard C. Pinkham
Assistant Examiner—Paul E. Shapiro
Attorney—Victor M. Helfand

ABSTRACT: An amusement device including a base element, a wirelike guide element supported by said base element and extending upwardly therefrom, the guide element having a downwardly extending loop. A compressible resilient means surrounds the guide element and rests on the base element, said resilient means supporting selectively a plurality of weighted members which slide on the guide element, whereby depending upon the degree of compression of said resilient element, upon release, one or more of said weighted members are urged past the downwardly extending loop portion of the guide element.



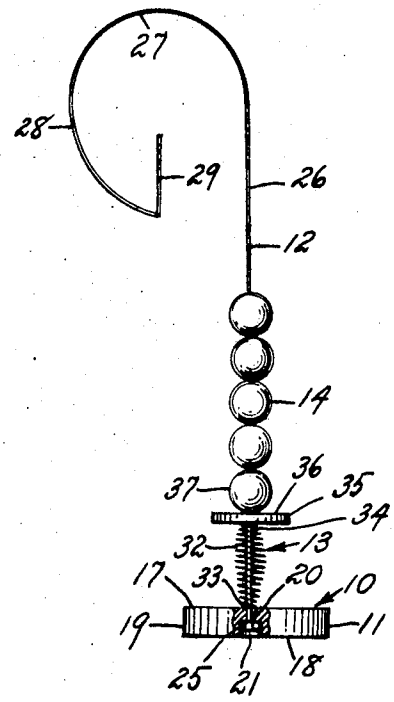


Fig. 1

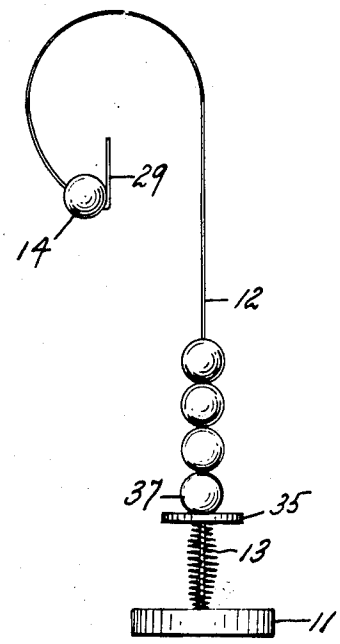


Fig. 2

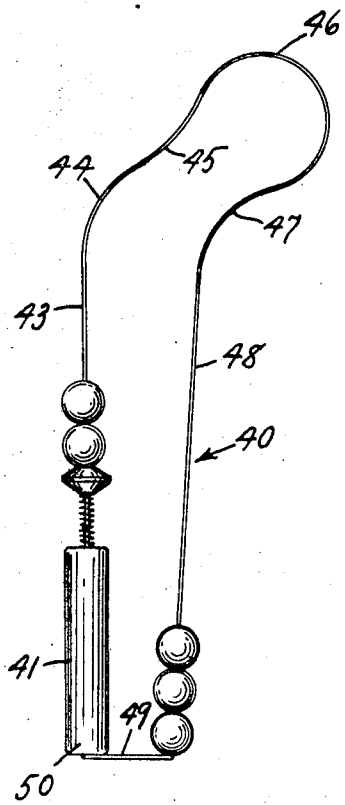


Fig. 3

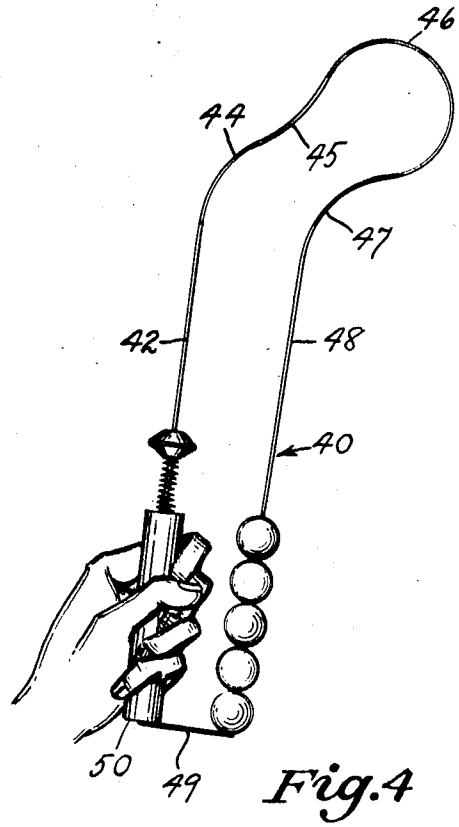


Fig. 4

A WIRE LOOP AMUSEMENT GAME

This invention relates generally to the field of amusement devices, and more particularly to one involving a question of skill on the part of the operator.

It is among the principal objects of the present invention to provide an amusement device in which a plurality of weighted members are supported in juxtaposed position upon a guide element, the guide element also supporting a manually compressible resilient means and having a curved portion associated therewith over which one or more weighted members may pass, depending upon the degree of compression of the resilient means, and the number of weighted members positioned thereabove at the time of release.

Another object of the invention lies in the provision of an amusement device the operation of which depends to a substantial degree upon the skill of the user.

Yet another object of the invention lies in the provision of an amusement device of the class described, in which the cost of fabrication may be of a reasonably low order, thereby permitting consequent wide sale, distribution and use.

A feature of the disclosed embodiments lies in the fact that the device may be constructed either as a hand held device, or for support by a table or other horizontal surface.

These objects and feature, as well as other incidental ends and advantages, will more clearly appear in the progress of the following disclosure, and be pointed out in the appended claims.

In the drawing, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIG. 1 is a view in elevation of a first embodiment of the invention.

FIG. 2 is a similar view in elevation of the first embodiment, showing certain of the component parts in altered relative position.

FIG. 3 is a view in elevation of a second embodiment of the invention.

FIG. 4 is a second view of the second embodiment, showing certain of the component parts in altered relative position.

In accordance with the first embodiment of the invention, the device, generally indicated by reference character **10**, comprises broadly: a base member **11**, a wirelike guide element **12**, a resilient element **13**, and a plurality of weighted members **14**.

The base member **11** may be of any suitable material, provided that it is possessed of sufficient weight to assure stability during operation. As seen in FIG. 1, it is bounded by an upper surface **17**, a lower surface **18** which can rest upon a table or other support (not shown) as well as a cylindrical side surface **19**. A centrally disposed vertical bore extends between the upper and lower surfaces **17** and **18**, and communicates with a lower recess **21**.

The guide element **12** is formed preferably of flexible steel wire, and includes a lower threaded end which penetrates the bore **20** to be secured by a nut **25** disposed in the recess **21**. Extending upwardly from the base member **11** is a vertical portion **26** connected to an upper downwardly curved portion **27** and a second vertical portion **28** having a hooked portion **29** which prevents passage of the weighted members **14** thereby.

The resilient element **13** includes a coil spring **32** disposed on the vertical portion **26**, a lower end **33** of which contacts the upper surface **17**, and an upper end **34** of which engages a slidably mounted finger-engageable member **35**. The upper surface **36** of the member **35** supports the lowermost weighted member **37**, each succeeding weighted member resting upon the lower one.

The weighted members **14** may be hollow balls of synthetic resinous material each having a bore penetrated by the guide element **12**. Although illustrated as being of spherical shape, they may also be any convenient decorative shape desired.

Operation of the device is commenced by placing all of the weighted members **14** in the position shown in FIG. 1, following which the finger-engaging member **35** is depressed a suitable distance and released, resulting in the transfer of energy from the spring **32** to the weighted members. With proper degree of compression, enough inertia will be imparted to just permit the uppermost weighted member to pass from the vertical portion **26** over the upper curved portion **27** to the second vertical portion **28**. If too much compression is involved, more than one weighted member will pass, and if insufficient compression has been made, none of the weighted members will pass.

On the next operation, it is necessary to compress the spring **32** slightly less, so that, as in the case of the first operation, the uppermost weighted member will pass from the vertical portion **26**. However, owing to the face that there are now fewer weighted members to place in motion, the degree of inertia to be imparted to them is correspondingly reduced, so that the degree of compression employed on the previous strokes is no longer applicable. Considerable practice is necessary to determine and apply the proper degree of compression which is relatively critical, and must be separately determined for each succeeding compressive action.

In the second embodiment of the invention, generally indicated by reference character **40**, the construction has been varied by forming the base element **41** in the form of a hand grip, which permits the device when used to be placed in other than a completely vertical orientation, thereby varying the amount of force required to propel the weighted members up the correspondingly angularly disposed guide element **42**. It will be appreciated that when using the second embodiment in other than a totally vertical condition, the mass of the weighted remains the same, but the effective force of gravity to be overcome is correspondingly varied.

In addition, the guide element **42** is provided with not only a vertical portion **43** corresponding to the vertical portion **26** in the first embodiment, but a plurality of energy dissipating curved portions **44**, **45**, **46** and **47**, as well as a second vertical portion **48** corresponding to the vertical portion **28** in the first embodiment. An end portion **49** is interconnected with the lower end **50** of the base element **41** to provide for retention of the weighted members.

I wish it to be understood that I do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

I claim:

1. An amusement device comprising: a base element, a wirelike guide element supported by said base element, and extending upwardly therefrom, said guide element including a first portion of substantially rectilinear configuration, adjacent said base element, and a downwardly curved section connected to said first portion, a compressible resilient element carried by said guide element, and a plurality of weighted members carried by and confined to said guide element and selectively resting upon said resilient element; whereby upon manual compression of said resilient element and subsequent release thereof, one or more of said weighted members will be urged to pass up said rectilinear portion and onto said curved portion.

2. Structure in accordance with claim **1**, said curved portion of said guide element having weighted-member-retaining means connected therewith.

3. Structure in accordance with claim **1**, said base element having means for manually grasping the same.

4. Structure in accordance with claim **1**, said base element having a horizontal lower surface for being supported upon a horizontally-disposed support.