Morrison et al.

[45] May 27, 1975

[54]	BALANCING TOY SET		
[75]	Inventors:	Howard J. Morrison, Deerfield; Donald F. Nix, Hanover Park, both of Ill.	
[73]	Assignee:	Marvin Glass & Associates, Chicago, Ill.	
[22]	Filed:	Sept. 26, 1973	
[21]	Appl. No.:	400,982	
[51]	Int. Cl		
[56]	UNI	References Cited FED STATES PATENTS	
1,648,	199 11/19	27 Sargent	

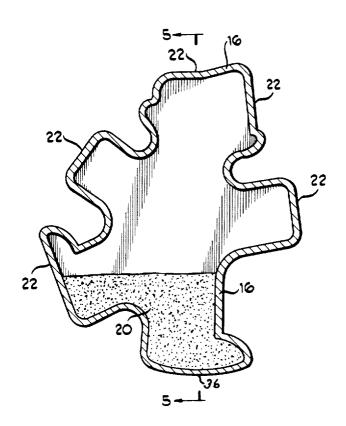
2.937.872	5/1960	Gilman 46/155
2,997,810	8/1961	Bellas 46/158
3,400,932	9/1968	Conrad 46/24

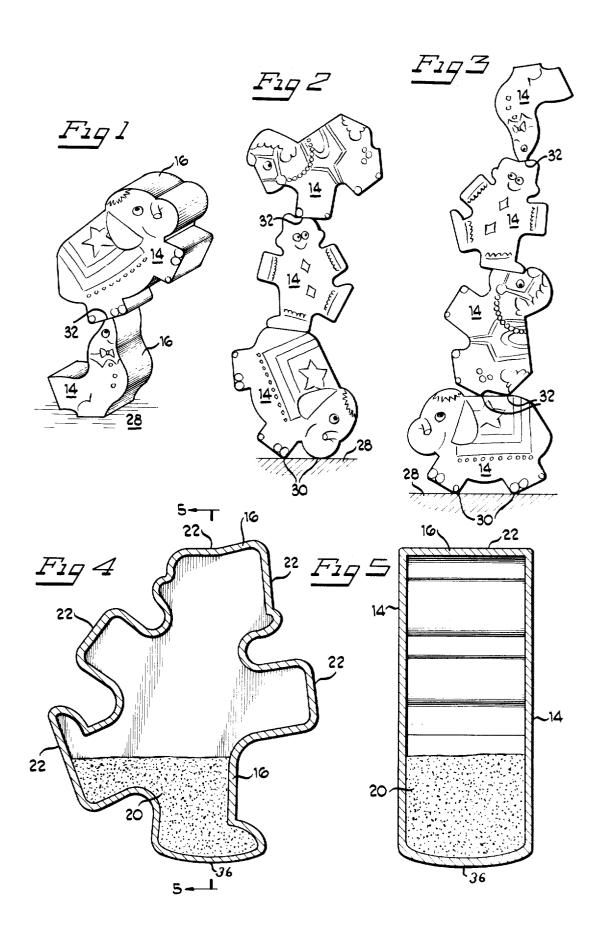
Primary Examiner—Louis G. Mancene Assistant Examiner—Robert F. Cutting Attorney, Agent, or Firm—Coffee & Sweeney

[57] ABSTRACT

A skill type toy which includes hollow circus or other animal figures which are partially filled with sand or other weighting fluent material such that the figures may be successively placed or stacked one on top of the other and balanced by positionally adjusting the distribution of the weighting fluent material within the figures.

7 Claims, 5 Drawing Figures





BALANCING TOY SET

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention relates generally to toys and in 5 particular to a balancing figure toy set in which a degree of skill is required in the balancing of figure type playing pieces on top of each other.

Toys of skill which require careful manipulation of playing pieces by the players have long been a favorite 10 with children as well as adults. Prior toys or toy sets include building blocks, rings, interlocking devices, and the like.

The present invention relates particularly to a toy set which involves the balancing of playing pieces, one on 15 edge. top of the other, with the playing pieces being formed in the shape of animals, circus figures, or other irregular shapes. The playing pieces are hollow, formed of plastic or other similar material, and are only partially filled with weighting fluent material, such as sand.

The primary object of the invention, therefore, is to provide a toy set wherein the balancing of playing pieces depends upon positioning as well as distribution of the weighting fluent material.

Other objects and advantages will be apparent from 25the following description of the selected embodiment illustrated in the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of two of the playing 30 pieces of this invention, one balanced on top of the other:

FIG. 2 is an elevational view of three stacked playing pieces of this invention:

FIG. 3 is another elevational view of four stacked 35 playing pieces of this invention;

FIG. 4 is a vertical sectional view through one of the playing pieces showing the location of the weighting fluent material; and

FIG. 5 is a section taken generally along line 5—5 of 40 FIG. 4.

DESCRIPTION OF THE PREFERRED **EMBODIMENT**

The toy of this invention includes a plurality of playing pieces formed in the shape of circus animals or other figures as shown in FIGS. 1, 2 and 3. Each playing piece has two generally flat side walls 14 whose perimeter is formed in an irregular manner such as to represent a particular animal or circus figure. The side walls 50 14 of each playing piece are separated by a continuous irregular surrounding wall 16 which is formed perpendicularly with both side walls 14 and follows the shape of the perimeter of the side walls 14. The side walls 14 and the surrounding wall 16 form a hollow enclosure representing a particular figure. The side walls 14 may also contain indicia thereon to represent more lifelike characters, as shown in FIGS. 1-3.

During manufacture of the playing pieces a fluent weighting material 20, such as sand or the like, is introduced into the hollow interior of the playing pieces such as to only partially fill the pieces.

Each wall 16 also is provided with a plurality of flat surface portions 22 for engagement with a table top or 65 at least one convex surface portion. other supporting surface as well as with similar surfaces on other playing pieces for stacking pruposes. As shown in FIGS. 1, 2 and 3, the playing pieces also can

be stacked and remain in equilibrium if points along the curved surrounding walls 16 are in contact with the ground or other supporting surface 28, as at 30, or an adjacent playing piece, as at 32. Actually a ' along the periphery of walls 14 as viewed in FIGS. 1-3 is a straight line or edge across the surrounding wall 16. Thus when two "points" are in contact with the supporting surface 28, as in FIGS. 2 and 3, two spaced supporting edges are provided to self-support the lowermost playing piece. More skill is required to balance the pieces when a single "point" or edge provides the stacking engagement between the pieces, as in in FIG. 1 and the uppermost stacked piece in FIG. 3. In order to permit balancing on a single edge, the edge must have some finite width rather than being a very sharp

The fluent weighting material 20 is provided in order that balancing of adjacent playing pieces can be achieved by a particular distribution of the fluent weighting material 20 which moves or displaces the center of gravity of the playing pieces in an attempt to maintain equilibrium in stacking the pieces. By adjusting the center of gravity of a particular playing piece in this manner, a playing piece can be balanced upon another subjacent playing piece in a position which would not be in equilibrium were it not for the fluid material.

FIGS. 4 and 5 show a playing piece which is provided with a convex or dome-shaped surface portion 36 which can be utilized for balancing purposes and about which the playing piece can be spun or rocked, which the proper distribution of the fluent material 20.

While the playing pieces have been described in connection with a specific embodiment, it is contemplated that various modifications and variations will occur to those familiar with the art without departing from the principles of this invention. For instance, any variety and shape of playing pieces can be employed other than the figures shown in the drawings.

We claim:

1. A balancing toy set, comprising: a plurality of substantially hollow rigid playing pieces only partially filled with fluent material so as to be shiftable within the playing pieces and, therefore, the playing pieces being capable of being stacked one on top of another in various positions and sequences by shifting the center of gravity of the playing pieces to maintain equilib-

2. The toy set of claim 1 wherein at least some of said playing pieces are irregularly shaped.

3. The toy set of claim 2 wherein at least some of said playing pieces are in the form of various animal figures.

- 4. A balancing toy set, comprising: a plurality of substantially hollow rigid playing pieces of irregular shape formed by a pair of generally parallel flat side walls, the perimeters of which define said irregular shape, said side walls being joined at said perimeters by a surrounding wall providing surface portions for engagement to stack the playing pieces, and a fluent material only partially filling at least some of said playing pieces so as to be shiftable within the playing pieces so that the playing pieces are capable of being stacked one on top of another.
- 5. The toy set of claim 4 wherein the surrounding wall of at least some of said playing pieces is formed with at least one generally flat surface for stacking purposes.
- 6. The toy set of claim 4 wherein the surrounding wall of at least one of said playing pieces is formed with
- 7. The toy set of claim 6 wherein said convex surface portion is dome-shaped.