July 28, 1970 J. BOSCO 3,521,886

LIGHTED NUMBERS GAME BALL
Original Filed July 18, 1966

Fig. 1

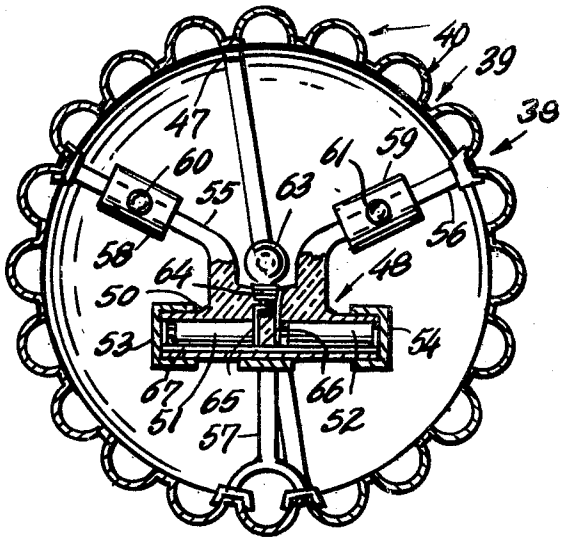
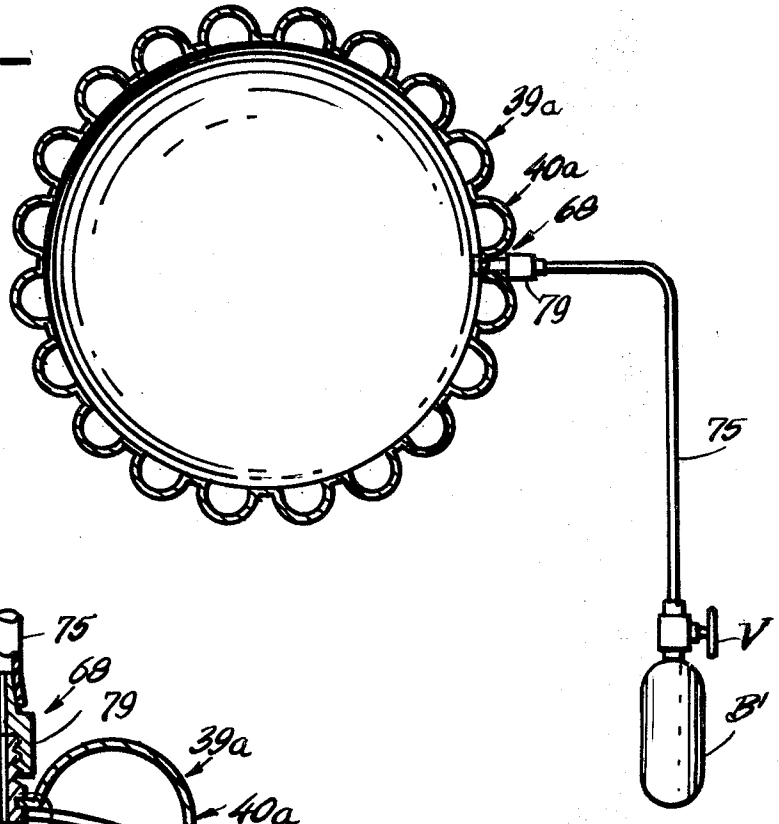


Fig. 2



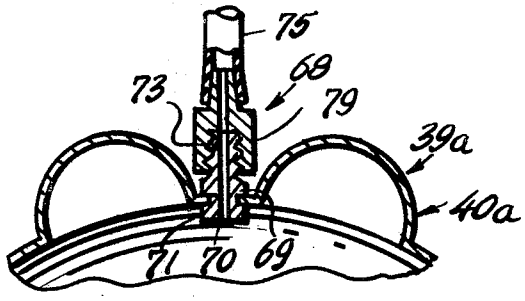


Fig. 3

Joseph Bosco
INVENTOR.

United States Patent Office 3,521,886 Patented July 28, 1970

3,521,886

LIGHTED NUMBERS GAME BALL

Joseph Bosco, 31 Summer St., Everett, Mass. 02149

Original application July 18, 1966, Ser. No. 566,188, now Patent No. 3,464,698, dated Sept. 2, 1969. Divided and this application July 19, 1968, Ser. No. 754,152
Int. Cl. A63b 71/00
U.S. Cl. 273—138 2 Claims

ABSTRACT OF THE DISCLOSURE

A pair of transparent semi-spherical shells are joined at their circular margins to form a spherical ball-shaped body. A tripod frame is mounted within the body. One leg of the tripod frame supports dry cell batteries and a light bulb electrically connected together. The other two legs of the tripod frame each include a weight, adjustably fastened by a screw to the respective leg for overall balancing of the body. The outer surface of the body consists of a plurality of convex dome-shaped protrusions each having a numeral imprinted thereon. The dome-shaped protrusions may be pushed inwardly to keep track of the numerals associated therewith for scorekeeping. The semi-spherical shells can be separated so as to push out the indexed domed-shaped protrusions and rejoined in order to be utilized again as a scorekeeping device. A modification utilizes a hollow spherical body made in one piece which pushes out the indexed protrusions by applying air pressure from an external source.

The present invention a division of my copending application Ser. No. 566,188, filed July 18, 1966, now Pat. No. 3,464,698, relates to a numbers game, and more particularly it relates to a means to dispense with the caller's chart commonly used by such games as bingo, lotto, blitz and beano. The present invention mainly will provide a spherical ball-shaped hollow member which upon its outer surface will carry a plurality of convex dome-shaped protrusions upon which the numbers of the caller's chart are being imprinted. The ball-shaped hollow member in question may be formed of transparent platsic material and may have a plurality of numerals from 1 to 75 imprinted upon its outer surface and may have a light source held within the hollow body.

More particularly relating to the games bingo, blitz, lotto and beano, and more particularly to the manner in which the game is played, the rules provide that each player participant is given a card upon which the number from 1 to 75 are imprinted in various combinations, in a checkered pattern and in such a manner as to provide five numbers running in horizontal rows, and five numbers running in vertical rows. As the game progresses the caller draws marked disks. As the numbers are read by the caller, the players with the numbered cards before them cover the numbers with plastic disks. The present invention, however, does not concern itself with the numbered card but rather with the ball-shaped member above mentioned.

While the present invention utilizes as a rule the same playing techniques and principles of the games called bingo, lotto, beano and blitz, however, it dispenses entirely with the caller's chart and in its place will substitute the ball-shaped member. In the ball the numbers of the caller's chart may be as already above described imprinted upon the outer surface of the dome-shaped members upon protrusions formed on its outer surface "(the numbers are not shown)."

Each number in the ball is identified by the corresponding number in the old caller's chart, the entire series of 75 numbers being represented by the 75 protrusions or

dome-shaped members upon the outer surface of the hollow ball. The ball itself would be formed of two separate semi-spherical sections each having a threaded flange. Of course, other methods of fastening the two semi-spherical sections or shells may be found applicable. During the course of the game the dome-shaped members will be depressed to register a number represented in the old game by the caller's chart. In such manner the numbers as they are being called are registered upon the ball-shaped member. At the conclusions of the game the ball will be checked by the caller and the depressed members will be noted. Then the ball will be quickly opened and the depressed dome-shaped members will by pushed outwardly (by finger) to return them to their pre-game position. Accordingly, the ball-shaped hollow member of the present invention will serve as the original caller's chart. To call the numbers the operator will roll the ball down an incline or a chute, which at its lowermost end would be provided with a recessed area where the ball will rest at a window which has a magnifying lense and a means for depressing a single dome-shaped protrusion to register a number called upon the ball. The inclined chute above described and the manner in which the dome-shaped members are depressed has been made a part of a separate application and will not be here claimed.

Accordingly, the main object of the present invention is to provide a hollow-shaped ball, made preferably of transparent plastic, which may have a light source therein.

A further object of the present invention is to provide a means to pass a light beam through the transparent material of the ball to make the numerals impressed upon the ball readily visible.

An additional object of the present invention is to provide means for mounting a battery and a light inside the hollow-shaped ball.

Another object of the present invention is to provide a convex lense to magnify the numbers imprinted upon the outer surface of the ball-shaped member. The lenses aforesaid may be mounted behind every number in said ball.

Another object of the present invention is to provide an air valve means to inflate the dome-shaped members formed upon the outer surface of the ball.

This invention also consists in certain other features of construction, and the combination of parts, to be hereinafter fully described, illustrated in the accompanying drawing, and specifically pointed out in the appended claims.

In describing the invention in detail, references will be made to the accompanying drawings, where like character numerals denote like or corresponding parts throughout the several views, in which:

FIG. 1 is a cross-sectional view through the ball-shaped member forming the embodiment of the present invention;

FIG. 2 is a cross-section through a modification shown a compressed air inflatable ball-shaped member; and

FIG. 3 is an enlarged cross-section through the air valve.

It is understood that the present form of disclosure is merely for the purpose of illustration, and that there might be various modifications thereof, without departing from the spirit of the invention as herein set forth.

Referring now more particularly to the drawing, the device **38** made in accordance with the present invention, best seen in FIG. 1, is formed with a plurality of dome-shaped members **39** which are so formed that they may be readily depressed. In FIG. 1 the ball-shaped member **38** is formed of two separate sections, or shells, with one shell held to the other by means of a circular flange. The flange may be an integral part of the ball and may be formed from the margins of either one of the shells the ball is made from.

The ball-shaped member **38** may be provided with a light source. The latter may be formed by a supporting base **48** which supports the body **50**, and within the covers **53** and **54** encloses a pair of dry cell batteries **51** and **52**, respectively.

The body **50**, by means of the tripod-shaped bracket and legs **55**, **56** and **57** may be mounted within the hollow space provided in the spherical body **48**, substantially as shown. A pair of adjustably held counter weights **58** and **59** may be provided for the sake of balance. By means of the set of machine screws **60** and **61**, the weights **58** and **59**, may be made loose and may be set to any relative position desirable to help balance the sphere as it tumbles down an inclined chute. The battery and the base combination may be formed to be small enough so as not to interfere with the lighting effect of the electric bulb **63**.

A pair of metallic connections **65** and **66** lead from the pair of dry cell batteries to the electric bulb **63**. A third connection **67** forming the electric contact between the two poles of the dry cell battteries is arranged in such a manner as to connect electrically the batteries to the bulb **63**, in series. When the bulb **63** is lit by the batteries, the light from the bulb will shine through the transparent body of the spherical member or the shell helping to make the numbers which are imprinted upon the convex domes **40** visible to the caller and to the players alike.

FIG. 2 shows a modification. In this case the ball **39***a* may be formed entirely of flexible and resilient rubber or rubber-like material. However, the dome-shaped members **40***a* may be arranged around the entire outer surface of the ball in very similar manner already above described for the plastic ball **38** shown in FIG. 1.

Generally speaking the ball **39***a* resembles in its construction a standard type playing ball with the dome-like formations **40***a* formed as an integral part thereto. The dome-shaped members **40***a* are depressed in similar manner already described. To inflate the dome-shaped members **40***a* and to return them to normal position there may be provided a high pressure air valve secured to the valve stem **68**. The valve stem **68** may be secured to any appropriate section of the ball **39***a*, substantially as shown in FIG. 2.

Reference now being had to FIG. 3, it can be discerned that the air valve **68** is formed of the mounting nipple **69**. The latter, by means of its extension **70** may be secured and made fast to the flanged opening **71** in the ball **39***a*. By means of epoxy or similar type pasting compound the nipple **69** may be permanently secured to the ball **39***a*. The nipple **69** has an extension **72** which is threaded and a centrally located air inlet hole **73**. By means of the threaded flange **75** and the flexible air hose **75** connected

thereto, the nipple **69** may be secured to a compressed air source means.

The ball **39***a*, by means of the air valve **68**, and the air hose **75** may be secured to an air pressure means of bottle B'. An air regulating and shut-off valve V supplies the necessary air pressure into the ball to inflate the dome-shaped members **40***a*. When the ball **39***a* is used during the normal run of the play, the interior of the ball is open to the atmosphere.

A careful examination of the foregoing description in conjunction with the invention as illustrated in the drawings, will enable the reader to obtain a clear understanding and impression of the alleged features of merit and novelty, sufficient to clarify the construction of the invention as hereinafter claimed.

Minor changes in shape, size and materials, and rearrangement of parts, may be resorted to in actual practice, as long as no departure is made from the invention claimed.

Having described my invention, what I claim is the following:

1. A spherical body of the class described, comprising in combination, a pair of transparent semi-spherical shells held to one another at their circular margins to form a spherical ball-shaped body, a light means mounted within the hollow space formed by joining said shells together, said means comprising a light bulb and a group of dry cell batteries, electrical conduit means to connect said batteries to said bulb, and means for supporting said light within said shells, said means being formed of a tripod frame, and balancing means provided in said frame, said balancing means including balancing weights, said weights being adjustably held within said frame.

2. The body as in claim **1** in which the shells outer surfaces consist of a plurality of convex dome-shaped protrusion each having a numeral imprinted thereon and the semi-spherical shells are separatingly held together.

References Cited

UNITED STATES PATENTS

2,849,819	9/1958	Murphy et al.	
2,903,820	9/1959	Bodell	46—228
3,011,048	11/1961	O'Brien	46—228 X
3,304,651	2/1967	Deyerl.	
3,458,205	7/1969	Smith et al.	

ANTON O. OECHSLE, Primary Examiner

A. W. KRAMER, Assistant Examiner

U.S. Cl. X.R.

273—58; 46—228