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BALLOON FOR RELEASABLY CARRYING TOY PARACHUTES

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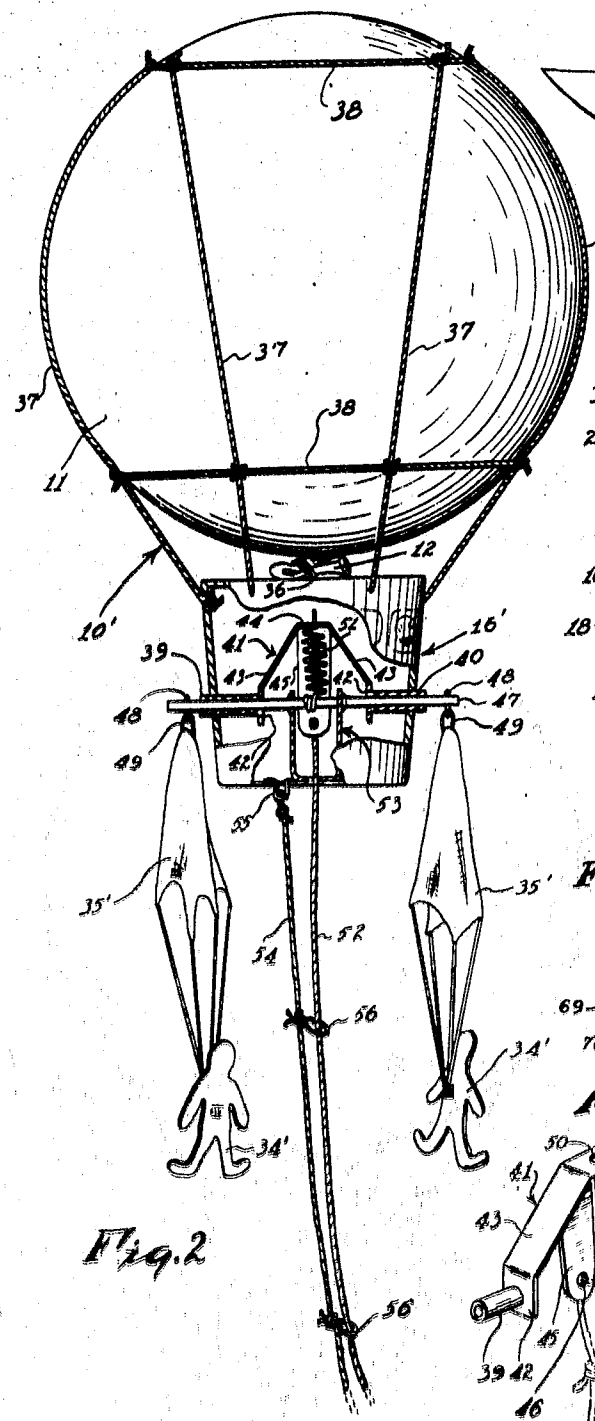


Fig. 2

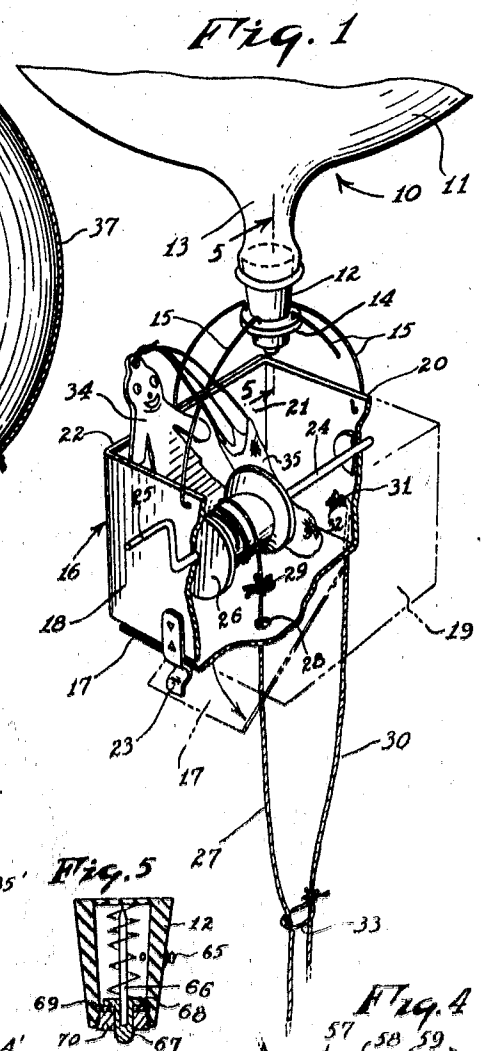


Fig. 1

Fig. 5

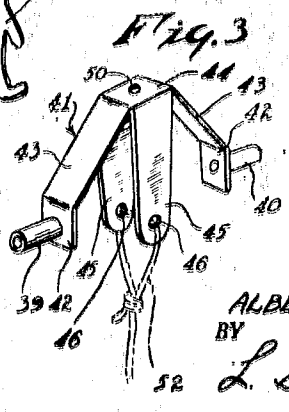


Fig. 3

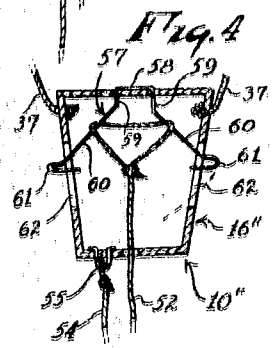


Fig. 4

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BALLOON FOR RELEASABLY CARRYING TOY PARACHUTES

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1 Claim. (Cl. 46—86)

This invention relates to toy balloon constructions.

It is an object of the present invention to provide a toy balloon construction including a basket filled with miniature parachute jumpers, means being provided for releasing the jumpers after the balloon has risen a predetermined distance above the ground.

It is still another object of the present invention to provide a toy balloon construction of the above type wherein a transverse shaft extends outwardly from the basket on either side, the ends of the shaft retaining rings connected to the miniature parachute jumpers and which are pushed off by a pair of sleeves slidable along the shaft and actuated by a string extending from the basket to the child below.

Other objects of the present invention are to provide a toy balloon construction bearing the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture, is easy to use and efficient in operation.

For other objects and for a better understanding of the invention reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a fragmentary perspective view of a toy balloon construction embodying the features of the present invention shown partly broken away;

Fig. 2 is a front elevational view of a modified form of the present invention, shown partly in section;

Fig. 3 is an enlarged perspective view of one of the parts shown in Fig. 2 and

Fig. 4 is a vertical sectional view of a still further modified form of the present invention,

Fig. 5 is a sectional view shown generally on line 5—5 of Fig. 1 of the compressed gas plug.

Referring more in detail to the drawing, in which similar reference characters identify corresponding parts throughout the several views, there is shown a toy balloon construction, referred to collectively as 10, and including a toy balloon 11 filled with a gas which is lighter than air, for example, hydrogen gas.

The gas is prevented from escaping from balloon 11 by means of a cork 12 inserted into the open neck 13 of the balloon.

The portion of cork 12 external to neck 13 fixedly carries a circular flange 14 provided around its periphery with openings therethrough which receive the downwardly bent ends of arcuate wires 15, substantially as illustrated.

Four such wires 15 are provided and support a cardboard basket 16, the lower ends of wires 15 being upwardly bent and passing through openings provided near the top of the side walls of basket 16.

The basket 16 is formed from a unitary blank consisting of a bottom 17 and side walls 18, 19, 20, 21 and 22, the side walls 21 and 22 overlapping and being secured together by glue or other means. The bottom 17 is connected to the remainder of the basket-forming blank along only one edge, that being the bottom edge of side wall 20, and is foldable downwardly along this edge, as shown in dotted outline in Fig. 1. A clip 23 secured to the outside of side wall 18 near the bottom edge thereof serves to retain the bottom 17 in a normally closed position.

A shaft 24 having an integral crank arm 25 is rotatably mounted in the side walls 18 and 20, substantially as illustrated in Fig. 1, and fixedly carries a spool 26. A string 27 is connected at one end to spool 26, being wound around the spool and extending downwardly of the basket 16 through an opening 28 in bottom 17 thereof. The string 27 is knotted as at 29 above opening 28 for a purpose which will hereinafter become clear.

A second string 30 passes inwardly through side wall 20 through an opening 31, this string being knotted as at 32 preventing its outward displacement through opening and extending downwardly from the basket adjacent string 27. A loop 33 connected to string 30 receives string 27 therethrough, substantially as illustrated.

A plurality of miniature cardboard figures 34 carrying miniature silk parachutes 35 are disposed within the basket 16.

In operation, with the bottom 17 retained in a closed position by the clip 23 and the basket 16 filled with the miniature parachute jumpers 34, 35, the balloon 11 and associated parts are permitted to rise into the air by letting out string 30. Meanwhile, the string 27 at the bottom end thereof is securely retained by the child below, causing the former to unwind from spool 26 and to pass downwardly through opening 28 until the knot 29 abuts the portion of bottom 17 surrounding opening 28, springing the bottom 17 into the dotted line position of Fig. 1. When this happens, the miniature jumpers 34 will drop through the now open bottom of basket 16 and parachute slowly to the ground in a novel and pleasing manner.

The ring 14 may preferably be formed of rubber separate from cork 12 and retained thereon by elasticity.

Referring now particularly to Figs. 2 and 3, there is shown a modified form of the present invention, referred to collectively as 10', and including the balloon 11, the neck 12 of which is now closed to prevent escape of the internal gas by means of string 36.

A basket 16' is now supported around its upper portion by means of cords 37, the latter being connected in suitable manner to cord rings 38 surrounding the balloon, substantially as illustrated.

The side walls of basket 16' are provided with oppositely disposed openings which slidably receive a pair of outwardly extending sleeves 39 and 40. The sleeves 39 and 40 at their inner ends are integrally connected to a V-shaped member 41 consisting of vertical end portions adjacent the sleeves 39 and 40, upwardly and inwardly extending portions 43 and a horizontal top portion 44. The top portion 44 is integrally formed with downwardly extending, parallel portions 45 provided at their bottom ends with aligned openings 46, substantially as illustrated in Fig. 3.

A shaft 47 passes through sleeves 39 and 40 and extends outwardly therefrom at each end, as shown in Fig. 2.

Miniature jumpers 34' provided with parachutes 35' are supported from the outer ends of shaft 47 by means of rings 48 or loops connected to the top, central portion of parachutes 35' by means of string 49.

The top portion 44 of member 41 is provided with an opening 50 through which the upper end of a spring 51 is passed and looped, as shown in Fig. 2, this spring extending downwardly between the portions 45 and be looped around the shaft 47 at its bottom end.

A string 52 is looped through openings 46 as shown in Fig. 3, and passes downwardly through an opening in the bottom of basket 16 to the ground below.

A U-shaped member 53 is secured to the bottom of basket 16' at its intermediate portion, the upwardly extending ends thereof being provided with transversely aligned openings which further support the shaft 47 intermediate the sleeves 39 and 40, the bottom intermediate portion of member 53 being provided with an opening aligned with the opening in the bottom of basket 16' and receiving therethrough the string 52.

A second string 54 is secured at its upper end to a loop 55 extending downwardly from and secured in suitable manner to the bottom of basket 16', as shown in Fig. 2, and extends downwardly adjacent the string 52. Loops 56 connected to string 54 receive string 52 therethrough, substantially as illustrated.

In operation, with the rings 48 retained on the outer ends of shaft 48, the balloon 11 and associated parts are permitted to rise into the air by letting out string 54.

Meanwhile, the string 52 is played out along with string 54. When the balloon has reached a desired height, the string 52 is pulled back, bringing top portion 44 downward towards shaft 47 against the action of spring 51, causing sleeves 39 and 40 to move outwardly and push rings 48 off the ends of shaft 47. When this happens, the miniature jumpers 34' will descend slowly by means of parachutes 35' in a novel and pleasing manner to the child.

It will be noted that in the above construction, the string 54 may be eliminated, the string 52 then serving as a mooring and also to release the parachute jumpers. In this case, the string 52 would be played out until the balloon had reached the desired extended height and then merely yanked back to release the chutists.

Referring now particularly to Fig. 4, there is shown a still further modified form of the present invention, referred to collectively as 10', and differing from the second form in the construction of the release device.

In this form, a triangular member 57 of spring metal consisting of a horizontal top, central portion 58, downwardly extending, vertical side portions 59 and downwardly and outwardly extending arms 60 terminating in looped ends 61 is provided.

The flat top portion 58 of member 57 is disposed on the top of basket 16'' with the portions 59 passing downwardly through suitable openings in the top of the basket, substantially as illustrated in Fig. 4. The opposite sides of basket 16'' are provided with relatively large openings 62, through which the looped ends 61 of arms 60 extend outwardly to support the rings 48 in a manner similar to the second form.

In this case, the string 52 is looped around the arms 60 and passes downwardly through the bottom of the basket by means of a suitable opening therein.

In other respects, this form of the invention is similar to that shown in Figs. 2 and 3, and like reference numerals identify like parts throughout the several views.

In operation, the rings 48 being retained on the looped ends 61, the balloon and associated parts are permitted to rise into the air by playing out string 54, the string 52 being played out along with the string 54. When the balloon has reached the desired height, the string 52 is pulled back, moving arms 60 downwardly and inwardly and releasing rings 48. When this happens, the jumpers 34' will float slowly to the ground on parachutes 35' in a novel and pleasing manner.

It will again be noted that in the above construction, the string 54 may be eliminated, the string 52 then serving both as a mooring and also to release the jumpers. In this case, the string 52 will be played out until the balloon has reached the desired height and then merely yanked back to release the chutists.

In Fig. 5 there is shown a charge plug. This plug is filled with gas through a valve 65 on the side thereof, and a puncturing pin 66 is adapted to pierce the upper wall of the plug when it is desired to fill the balloon with the gas. On the lower end of the pin 66 is a press button 67 having a flange 68 against which a compressed spring acts to force sealing engagement of the flange against a sealing washer 69 that is supported on the lower end of the plug by a threaded retaining member 70.

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 claim.

I claim:

A toy balloon construction comprising a balloon, a container member, means interconnecting said member and said balloon, a plurality of miniature figures, a miniature parachute carried by each of said figures, said figures and parachutes being releasably carried by said container member, and means controllable from the ground for releasing said figures and parachutes from said container member after ascension of said balloon, said means for releasing said figures comprising said container member having oppositely disposed openings therein, a pair of sleeves located in said openings, an inverted V-shaped member of resilient material connecting the inner ends of said sleeves, said V-shaped member at the top, central portion thereof fixedly carrying a pair of downwardly extending, parallel strips, a shaft within said sleeves and extending outwardly beyond the outer ends thereof, a spring connecting the top of said V-shaped member and the middle of said shaft intermediate said strips, a length of string connected to the bottom of said strips and passing downwardly to the ground through an opening in the bottom of said container member and rings connected to the tops of said parachutes and located on the outer ends of said shaft.

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