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PNEUMATIC SPACE CAPSULE

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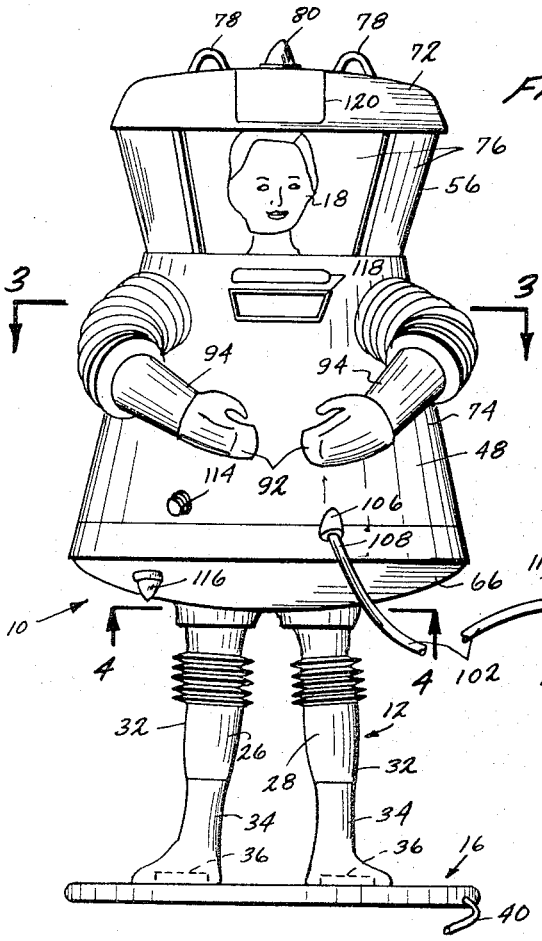



FIG. 2

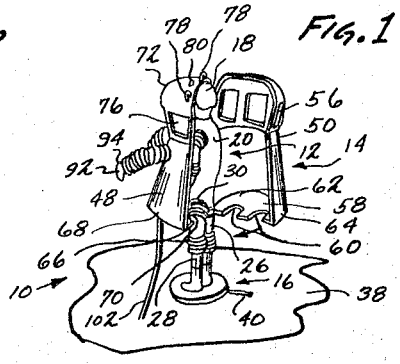
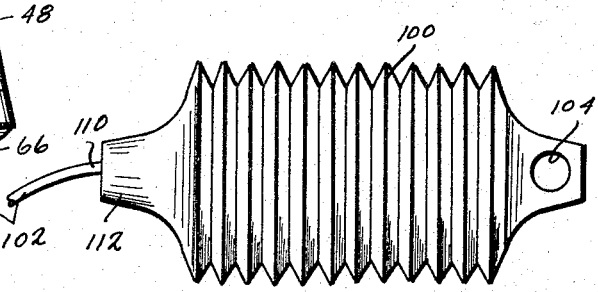



FIG. 1



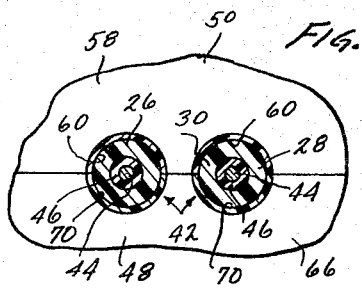




FIG. 4

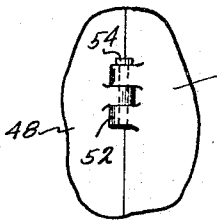



FIG. 5

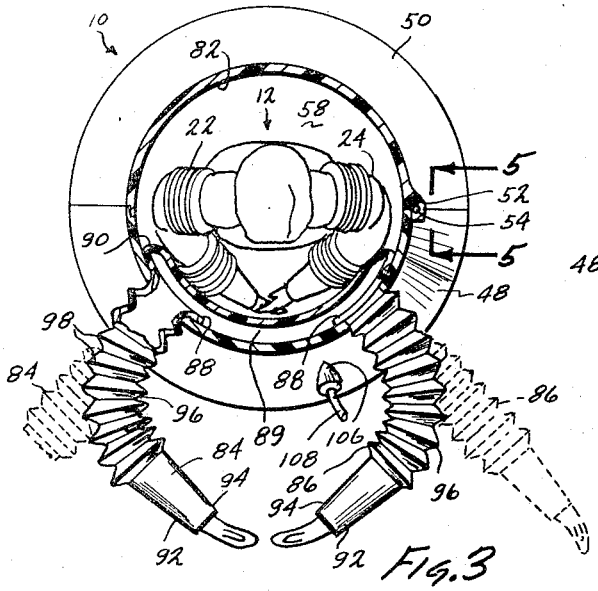



FIG. 3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# PNEUMATIC SPACE CAPSULE

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## ABSTRACT OF THE DISCLOSURE

A rigid hollow casing having two hinged halves with opposed notches in their edges so that a doll may be placed in the casing with its legs extending through the openings defined by the notches when the casing is closed. A pair of flexible, hollow, resilient arm members extending from the casing and communicating with a bladder chamber in the casing, and pump means connected to the bladder chamber to apply air pressure in the arm members to cause them to change shape or position.

The present invention relates to a new and useful pneumatic space capsule toy and more particularly to such a toy in combination with a doll simulating an astronaut in a space suit.

A principal object of the present invention is to provide a new and useful pneumatic space capsule toy.

Another object of the present invention is to provide such a toy including a housing means which simulates a space capsule and which has hollow, simulated, space-suited arms connected thereto and to air supply means for admitting air under pressure to the arms for changing the shape thereof.

A further object of the present invention is to provide a toy of the type described which may be quickly and easily mounted on a doll by engaging apertures provided in the bottom wall of the toy around the legs of the doll.

Yet a further object of the present invention is to provide a simulated space capsule toy which includes simulated, space-suited arms in the form of inflatable bellows which are formed with a preset shape simulating human arms bent at the elbows and which are inflatable to an extended position by air under pressure which is supplied to the simulated arms through a pump and conduit means connected to the space capsule toy.

According to the present invention, a pneumatic space capsule toy is provided in combination with a doll having a head, a torso, a pair of arms and a pair of legs. Each of the legs includes an upper portion and a lower portion.

The toy includes a housing means having an encompassing side wall and a bottom wall. The bottom wall is provided with a pair of apertures for receiving each of the doll's legs to connect the housing means to the doll in such a manner that the upper portions of the legs, the torso, the arms and the head are housed in the housing means while the lower portions of the legs extend below the bottom wall outside of the housing means. The doll's arms may be folded down along the torso out of sight when the doll is inside the housing means.

A pair of hollow, simulated arms are connected to the side wall. Each simulated arm is made out of a bellows-type diaphragm having a preset shape simulating human arms bent at the elbows. The accordion pleated structure of the arms simulates an astronaut's space suit. Each simulated arm has a first end which is closed by a simulated human hand and a second, open end which is connected to the housing means in fluid communication



with a bladder forming an air chamber in the housing means. An air pump is connected to this chamber through a suitable flexible conduit means so that the arms may be actuated from a remote location. When air under pressure is supplied to the arms from the pump, the arms extend to an open position where they are straight.

The doll may be provided with feet in which permanent magnets are embedded for connecting the doll to a magnetizable, simulated space sled. The sled has a cord attached thereto for pulling it over a suitable surface with the doll and pneumatic space capsule combination in position thereon.

The space capsule toy may be provided with windows at its upper end through which the doll's head is visible when the doll is in position inside the housing means.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages thereof, may best be understood by reference to the following description taken in connection with the accompanying drawings in which like reference characters refer to like elements in the several views.

In the drawings:

FIGURE 1 is a perspective view of a pneumatic space capsule toy of the present invention showing the space capsule portion thereof in an open position;

FIGURE 2 is an enlarged, elevational view of the toy of FIG. 1;

FIGURE 3 is a cross-sectional view taken along line 3—3 of FIG. 2;

FIGURE 4 is a partial, cross-sectional view taken along line 4—4 of FIG. 2; and

FIGURE 5 is an enlarged, partial cross-sectional view taken along line 5—5 of FIG. 3.

Referring again to the drawings, a pneumatic space capsule toy, generally designated **10**, includes a space man doll **12**, a housing means **14** and a simulated space sled **16**.

The doll **12** includes a head **18**, a torso **20**, a pair of arms **22**, **24** and a pair of legs **26**, **28**. The legs **26**, **28** each includes an upper portion **30** and a lower portion **32**. Each lower portion **32** is provided with a simulated boot **34** in which a permanent magnet **36** is embedded for adhering the doll **12** to the sled **16**, which may be made from a magnetizable material. The sled **16** may be pulled over a suitable surface **38** (FIG. 1) by a cord **40** which is attached to the sled **16**, as shown in FIG. 2. The doll **12** may be of a pliable type which is maintained in bent positions by an armature means **42** having a soft wire core **44** and a rigid portion **46**.

The housing means **14** includes a front housing half **48** and a rear housing half **50** which are joined together by hinge means **52** including a hinge pin **54**. The housing halves **48** and **50** may be opened to the position shown in FIG. 1 for placing the housing means **14** on the doll **12** in such a manner that the head **18** is disposed within the upper portion **56** of the housing means **14** and the lower portions **32** of the legs **26**, **28** extend below a bottom wall **58** through aperture means **60** provided therein. The bottom wall **58** includes a first semicircular wall half **62** which closes the lower end **64** of the housing half **50**. A second semi-circular bottom wall half **66** closes the lower end **68** of the housing half **48** and is provided with aperture means **70** which match the aperture means **60**.

The upper portion **56** includes a domed top portion **72** which is connected to an intermediate portion **74** of the housing means **14** by a plurality of simulated window panes **76** for exposing the doll head **18** to view. A pair

of simulated hooks **78** are affixed to the top **72**, together with a simulated lamp **80**.

When the front housing half **48** and the rear housing half **50** are closed, as shown in FIG. 3, an encompassing side wall **82** is formed for enclosing the upper leg portions **30**, the torso **20** the doll's arms **22**, **24** and the head **18** in the housing means **14**. A pair of hollow, simulated clothing means or space-suited arms **84**, **86** have open ends **88** affixed to the side wall **82** in fluid communication with an air chamber **89** formed inside the front housing half **48** by a flexible bladder **90** and the side wall **82**. The arms **84**, **86** each include a closed end **92** formed by a mittened hand-and-wrist simulating member **94**. The arms **84**, **86** each includes an upper arm portion **96** which is preferably molded in the shape of a bellows-type diaphragm having accordion pleats **98** which are preset in such a manner that the arms **84**, **86** are bent inwardly toward each other bringing the ends **92** together. When air under pressure is supplied to the arms **84**, **86** through the air chamber **89**, the arms **84**, **86** will be extended to the broken line position shown in FIG. 3. Air under pressure may be supplied to the chamber **89** by an air pump **100** which is connected to the chamber **89** by a flexible conduit **102** which, in turn, may be of sufficient length to operate the arms **84**, **86** from a remote location by actuating the pump **100**. The pump **100** includes a hand grip **104** which may be grasped by a user of the toy **10** for actuating the pump **100**.

The front housing half **48** is provided with an air inlet **106** communicating with the air chamber **89** and receiving the end **108** of conduit **102**. The other end **110** of conduit **102** is connected to the discharge end **112** of the pump **100**. A simulated pressurizing valve **114** and a simulated lamp **116** are provided on the front housing half **48** together with simulated inspection ports **118**. Another simulated inspection port **120** is also provided on the front housing half **48** on the top portion **72**.

While the particular pneumatic space capsule toy herein shown and described in detail is fully capable of attaining the objects and providing the advantages hereinbefore stated, it is to be understood that it is merely illustrative of the presently preferred embodiment of the invention and that no limitations are intended to the details of construction or design herein shown other than as defined in the appended claims.

What is claimed is:

**1.** A pneumatic capsule toy for a doll having a head and a body, said capsule toy comprising:

substantially rigid housing means for encompassing at least a part of said doll;

hollow, flexible means extending outwardly from within said housing means, said flexible means having a normal relaxed shape and being affected by air under pressure therein to change to an inflated shape; and

air supply means in fluid communication with the inner ends of said flexible means within said housing for admitting air under pressure only thereto for changing the shape thereof.



**2.** A capsule as stated in claim **1** including a simulated space sled for supporting said doll, said sled including a body portion and a cord connected to said body portion for pulling said toy over a suitable surface, said sled being made from a magnetizable material for magnetically attracting said doll.

**3.** A capsule as stated in claim **1** including window means provided in the upper end of said housing means, said head being visible through said window means when said housing means is connected to said doll.

**4.** A capsule as stated in claim **2** wherein said doll includes a pair of legs, a foot connected to each leg and a magnet embedded in each foot for adhering said doll to said sled by magnetic attraction.

**5.** A capsule as stated in claim **1** wherein said housing means includes a front housing half and a rear housing half and hinge means connecting said housing halves together, said flexible means extending from one of said housing halves.

**6.** A capsule as stated in claim **1** wherein said clothing means comprises a pair of accordion pleated bellows each having a normally-bent preset for simulating space-suited arms bent at the elbows, said air under pressure extending said bellows to a substantially straight position.

**7.** A capsule as stated in claim **6** wherein said air-supply means comprises an air pump and conduit means connecting said air pump to said arms.

**8.** A capsule as stated in claim **6** wherein said air-supply means includes bladder means mounted in said housing means in fluid communication with said arms, conduit means in fluid communication with said bladder and air pump means in fluid communication with said conduit means.

**9.** A capsule as stated in claim **6** wherein said doll includes a pair of legs, each of said legs having an upper portion and a lower portion and wherein said housing means includes a bottom wall, said bottom wall being provided with aperture means for receiving said legs to connect said housing means to said doll in such a manner that said upper portions of said legs, said body and said head are housed in said housing means while said lower portions of said legs extend from said bottom wall outside of said housing means.

**10.** A capsule as stated in claim **9** wherein said air-supply means includes bladder means mounted in said housing means in fluid communication with said arms, conduit means in fluid communication with said bladder and air pump means in fluid communication with said conduit means.


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