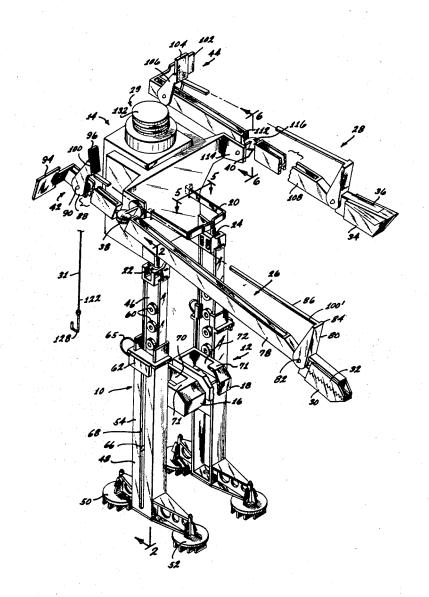
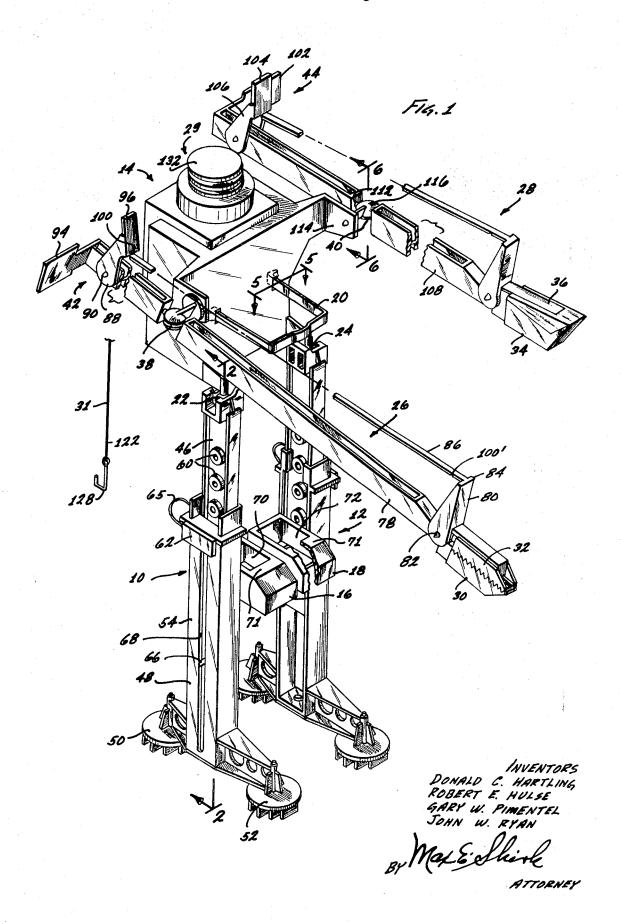
| [72]<br>[21]<br>[22]<br>[45] | Appl. No. Filed Patented Assignee | Donald C. Hartling Garden Grove; Robert E. Hulse, Torrance; Gary W. Pimentel, Downey; John W. Ryan, Los Angeles, all of, Calif. 779,982 Nov. 29, 1968 July 27, 1971 Mattel, Inc. | [56] References Cited UNITED STATES PATENTS   |   |   |
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| [73]                         | radigitee                         | Hawthorne, Calif.  | ,   | 1948 Great Britain  | 272/70.1<br>46/201                      |
|                              |                                   |  | Primary Examiner—Louis G. Mancene Assistant Examiner—A. Heinz Attorney—Seymour A. Scholnick |   |   |

| [54] | SPACEMAN CARRIER TOY 7 Claims, 10 Drawing Figs. |                |          |
|------|---|----------------|----------|
| [52] | U.S. Cl   |                | 46/116   |
|      | 272/70.1, 46                                    | 6/120, 46/151  | , 46/161 |
| [51] | Int. Cl.  | A63            | h 13/00  |
| [50] | Field of Search                                 | 3/4;           | 46/101   |
|      | 102, 104, 105, 116, 120, 2                      | 45, 247, 39, 2 | 14,219   |
|      | 201.  | 135: 272/70.   | 1: 2/264 |

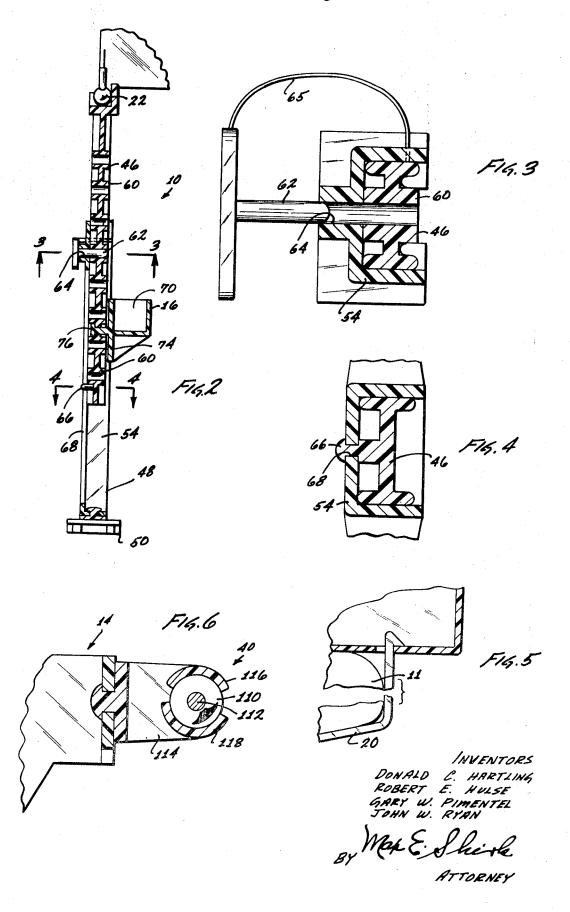
ABSTRACT: A toy for a spaceman doll to provide the effect of amplification of the stride and reach of the doll. The carrier comprises a pair of adjustable stilts with clamps for holding the boots of a spaceman doll. A frame which simulates a backpack for the doll, pivotally joins the stilts near their top to enable movement of the stilts apart and together to simulate giant doll strides. Long grasping tools on each side of the doll simulate apparatus for extending its reach.



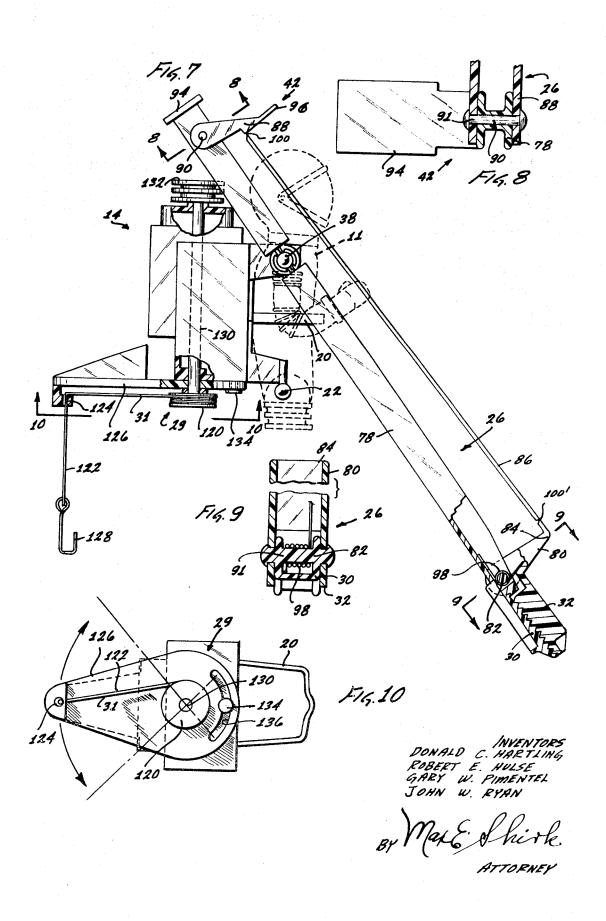
# SHEET 1 OF 3



SHEET 2 OF 3



SHEET 3 OF 3



#### SPACEMAN CARRIER TOY

#### BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to futuristic and space toys.

2. Description of the Prior Art

One concept which appears appropriate to space toys is the use of apparatus for amplifying the capabilities of spacemen. 10 Thus, a toy which can be used with a spaceman doll to simulate amplification of his stride, strength, and reach provides an interesting and stimulating toy.

### **OBJECTS AND SUMMARY OF THE INVENTION**

An object of the present invention is to provide a toy carrier for a spaceman doll which appears to amplify the physical capabilities of the doll in a space environment.

Another object is to provide an interesting and imaginationstimulating toy.

In accordance with the present invention, a toy carrier is provided for use with a spaceman doll, which appears to amplify the capabilities of the doll. The carrier comprises a pair of stiltlike members that have clamps for holding the boots of the doll to retain the doll thereon. The stiltlike members may be adjustable in height, so that the apparent amplification of the doll's stride can be varied.

In one embodiment of the invention, the stilts are pivotally joined at their top to a frame which is in the form of a backpack. The spaceman doll is positioned so that the backpack frame appears to be carried by him, rather than being a part of the stilt structure. A long grasping tool extends from each side of the frame, to provide an apparent amplification of the doll's reach. Each grasping tool can be operated by levers near the spaceman, so that a child can operate the tools from behind the doll where he views the surroundings as the doll appears to view them. This promotes an identification of the child with the spaceman doll, to stimulate the child's imagination and enhance his enjoyment of the toy.

The novel features of the invention are set forth with particularity in the appended claims. The invention will be best understood from the following description when read in conjunction with the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a spaceman carrier toy constructed in accordance with the invention;

FIG. 2 is a partial sectional view taken on the line 2-2 of FIG. 1;

FIG. 3 is an enlarged partial sectional view taken on the line 3-3 of FIG. 2;

FIG. 4 is enlarged partial sectional view taken on the line 4-4 of FIG. 2;

FIG. 5 is enlarged sectional view taken on the line 5-5 of 55

FIG. 6 is enlarged partial sectional view taken on the line

FIG. 7 is a partial side elevation view of the carrier toy of FIG. 1, showing a portion of a spaceman doll on the apparatus; FIG. 8 is a sectional view taken on the line 8-8 of FIG. 7;

FIG. 9 is a partial sectional view taken on the line 9-9 of FIG. 7; and

FIG. 7.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

A shown in FIG. 1, the spaceman carrier toy comprises a pair of stilt members 10 and 12, and a frame 14 in the form of 70 a spaceman's backpack for connecting the stilt members. The carrier toy is designed for use with a spaceman doll of a predetermined size. Each of the stilt members carries a bootholder 16, 18 for holding the boot portion of one of the doll's legs, while the backpack frame has a bracket 20 for en- 75 the upper stilt element.

circling the chest of the doll so that the frame appears to be supported on the doll's back. The spaceman doll, which is partially shown at 11 in FIG. 7, is generally already enclosed in a space suit so that the carrier toy serves to support him above the ground and amplify his capabilities, rather than to appear to enclose or protect him. The doll also is preferably constructed so that it is possible, that is, it may have a soft wire frame to provide flexibility so that its arms and legs can be moved to a variety of positions.

The carrier toy has universal ball joints 22 and 24 that connect the stilt members to the backpack frame, to permit the stilt members to be pivoted apart and together. The legs of the posable doll also move apart and together, so that the doll ap-15 pears to have operated the stilts to take a giant step or to brace itself. A pair of long tools 26 and 28, which are longer than the arms of the doll, are pivotally mounted on either side of the backpack frame near the position where the shoulders of the spaceman doll are received. This allows the arms of the doll to grasp the tools for almost any position to which the tools have been pivoted, so that the doll appears to have manipulated them. A winch 29 is also provided on the backpack frame for raising items on a cable 31 from the ground to the level of the

One of the long tools 26 is a claw with jaws 30 and 32 that can open and close to grasp items. The other long tool 28 is a bucket tool with a bucket 34 for holding items and a lid 36 that opens and closes over the bucket. Each tool is pivotally mounted on a universal ball joint 38, 40 to the backpack frame, to enable movement of the tools in a wide variety of directions. Each tool has a manual operating mechanism 42, 44 to be described in detail below, for enabling a child to open the claws or bucket elements. The operating mechanisms are positioned near the rear of the backpack so that they both can be operated by a child positioned immediately behind a spaceman doll and facing in the same direction as the doll. This enhances the ability of the child to imagine himself as a spaceman, to thereby increase the entertainment provided by the toy. The child can pivot the long tools to a variety of directions while manipulating the operating mechanisms, to simulate operation by a spaceman doll for extending the length of his reach even as far as the ground.

The stilt members 10 and 12 are substantially the same, so 45 that a description of stilt member 10 applies to the other. The stilt member 10 has an upper element 46 and lower element 48 that are connected together. Lower element 48 has a pair of pads 50 and 52 that stabilize it to prevent the doll carrier from falling forward or backward. The element 48 has a channel portion 54 which enables the upper element 46 to slide up and down therein. By raising and lowering the upper elements of the stilt members, the child can vary the apparent stride of the spaceman doll to an amount which the child deems appropriate.

As also shown in FIGS. 2 through 4, the upper element 46 has numerous bosses 60 which have holes in them. A retaining pin 62 can be projected through an aperture 64 in the channel portion 54 and into one of the boss holes, to fix the vertical position of the upper element. A string retaining member 65 extends between the retaining pin and the channel portion to prevent loss of the pin. A guide 66 is also provided near the bottom of the upper element which moves along the slot 68 in the channel portion to hold the upper element to the channel FIG. 10 is a partial bottom view taken on the line 10-10 of 65 portion. In order to adjust the height of the stilts, the retaining pin of each stilt member is pulled out, the upper element 46 is raised or lowered, and the pin is inserted into a new boss hole.

> The bootholders 16 and 18 are in the form of boxes with apertures 70 and 72 through which the boots can be inserted. Overhanging top portions 71 prevent the toe portions of the boots from lifting out, so that the boots are retained in place. As shown in FIG. 2, each bootholder has a downwardly depending portion 74 that rests against the inner surface of an upper stilt element, and a hook 76 that fixes the bootholder to

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The claw tool 26, which is best shown in FIGS. 1 and 7, includes an elongated member 78 which is connected by the ball joint 38 to the backpack frame. The front end of the elongated member forms one jaw 30. The other jaw 32 includes a lever portion 80 pivoted at 82 to the elongated member, and having an end 84. A long tension member 86 extends from the end 84 of the lever portion to the rear of the elongated member where the operating mechanism 42 is located. The operating mechanism 42 comprises a lever 88 pivotally mounted at 90 to a point near the rear end of the elongated member, and coupled to the tension member 86. Tabs 94 and 96 on the elongated member 78 and lever 88 can be moved together by a child, to pull the tension member 86 and thereby pivot jaw 32 to an open position. A spring 98 tends to pivot the jaws closed. A child can grasp the tab 94 in his hand, laying a finger on the

position while operating it to grasp and release articles.

The elongated member 78 has an H cross section for rigidity and light weight. The pivots 82 and 90 are simple pins 91 that project through holes in the member as shown in FIG. 8 for pivot 90. The tension member 86 is provided with a "living hinge" construction at 98 and 100 to facilitate operation without requiring separate hinges at opposite ends of the member. A living hinge is constructed by providing a reduced section in a flexible material such as polypropylene. This construction also permits molding of the integral, or one-piece, tension member with the levers 80 and 88, to provide a large integral member.

tab 96 to operate it, and thereby move the claw tool to any

The bucket tool 28 is constructed in a manner similar to that of the claw tool. It has a tab 102 for grasping by the hand and a tab 104 at the end of a lever 106 that is pivotally connected to an elongated member 108 for moving by a finger to operate the bucket. The construction of the pivot joints 38 and 40 by which the tools are joined to the backpack frame is shown in FIG. 6. The joint 40 includes a ball 110 and a rod 112 that extends through the ball and forms part of the elongated member 108 of the bucket tool. A bracket 114 fixed to the backpack has a pair of socket members 116 and 118 that surround the ball to hold it in place while allowing it to pivot to a limited degree in any direction.

The winch 29, which is best shown in FIGS. 7 and 10, includes a drum 120 mounted on the backpack frame, which can hold many turns of a thin string or cable 122. The cable extends through an aperture 124 in an extension bracket 126 at the back of the backpack frame, and the cable has a hook 128 at its end for engaging items to be lifted and lowered. The drum 120 is fixed to a shaft 130 hat extends vertically through the backpack frame, and has a wheel 132 at its upper end. The wheel 132 holds the shaft on the backpack frame, and also can be turned by a child to raise or lower the cable. The extension bracket 126 is pivotally mounted on the shaft so that it can be swiveled to a limited extent. A guide pin 134 in the backpack frame engages an annular slot 136 in the bracket to brace it at any position.

Thus, the toy carrier supports a spaceman doll in a manner that provides the appearance of increased stride and reach for the doll. The toy also allows the child to adjust the degree of amplification of the stride and to pose the doll and carrier in a variety of positions. Tools for amplifying the doll's reach can be rotated or moved to a variety of positions and also operated from a position immediately in back of the doll, where the child views the terrain as he would if he were the spaceman doll.

Although particular embodiments of the invention have 65 been described and illustrated herein, it is recognized that modifications and variations may readily occur to those skilled

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in the art, and consequently, it is intended that the claims be interpreted to cover such modifications and equivalents.

What we claim is:

 A toy for use with a doll that has movable legs comprisng:

a pair of stilt members for engaging the legs of said doll, to hold said doll above the ground; a rigid boxlike frame having means for holding the same

rigid boxlike frame having means for holding the same against a side of the body of said doll; and

means fixed on said frame pivotally joining said frame to each of said stilt members, whereby to pose said doll legs and stilt members into a variety of configurations.

2. The toy described in claim 1 wherein:

each of said stilt members comprises an elongated lower element for resting on the ground and an elongated upper element having means for engaging a leg of said doll, one of said elements having a plurality of apertures spaced along its length and the other having at least one aperture for aligning with a hole in the other element, and each stilt member includes a pin for insertion through aligned holes in said elements, whereby to vary the apparent stride of said doll.

3. The toy described in claim 1 wherein:

each of said stilt members includes a boxlike member with an aperture for receiving a foot of a doll, said boxlike member having a portion for overhanging the toe portion of said foot to retain said foot in place.

4. The toy described in claim 1 including:

an elongated grasping tool pivotally mounted on said frame adjacent to the position of the shoulder of a doll when a doll is engaged with said frame, said tool being larger than the arms of said doll, whereby to enhance the appearance of said tool as apparatus for amplifying the reach of said doll

5. A spaceman carrier toy comprising:

carrier means for holding a spaceman doll above the ground in predetermined relation to said carrier means; and

- a tool including an elongated member pivotally mounted on said carrier means at a position adjacent the shoulder of a doll thereon, said member having a forward portion extending forward of said carrier with movable means at its forward end for performing a simulated tool function, and said member having a rearward portion extending rearwardly to and beyond the rear of said carrier with operating means thereon for operating said movable means, whereby to enable a child positioned immediately behind said carrier and
- 6. The toy described in claim 5 wherein:

said movable means comprises a first member mounted on said elongated member, and a second member pivotally mounted on said elongated member for movement toward and away from said first member; and

said operating means comprises a lever mounted on said rearward portion of said elongated member, and a tension member extending between said lever and said second member of said movable means;

said tension member comprising an integral elongated rod of flexible material with a first portion of reduced cross section adjacent to said lever and a second portion of reduced cross section adjacent to said second member of said movable means.

7. The toy described in claim 5 wherein:

a frame configured to simulate a backpack for a doll is pivotally supported on said carrier; and

said elongated member being pivotally mounted on said frame.