United States Patent

Balza

[15] **3,706,155**

[45] **Dec. 19, 1972**

[54] **JOINTED FIGURE TOY HAVING COOPERATING BEARING SURFACES OF DUPLICATE SIZE AND CONTOURS**

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[22] Filed: **Aug. 30, 1971**

[21] Appl. No.: **175,985**

[52] **U.S. Cl.** **46/151**, 46/161, 46/162

[51] **Int. Cl.** **A63h 3/46**

[58] **Field of Search**.....46/115, 161, 162, 163, 151, 46/173

[56] **References Cited**

UNITED STATES PATENTS

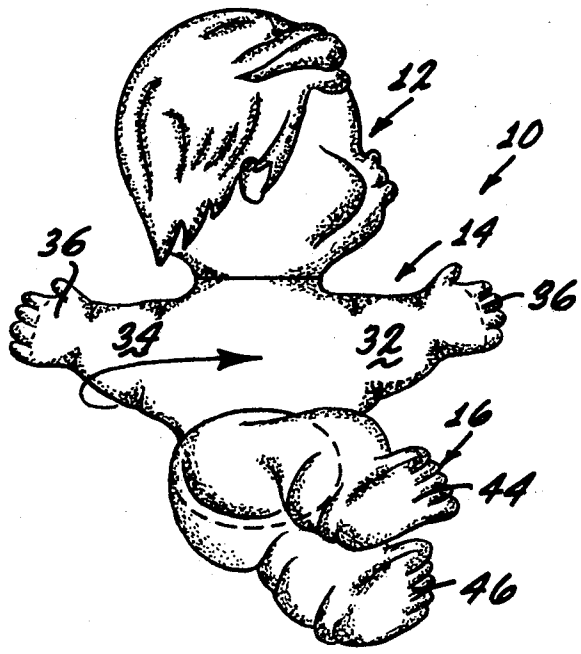
3,221,442	12/1965	Estern et al	46/162 X
1,345,052	6/1920	Williams	46/161
2,760,303	8/1956	Del Mas	46/163 X
2,884,739	5/1959	Ketcham	46/116 X

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Assistant Examiner—Robert F. Cutting
Attorney—Seymour A. Scholnick

[57] **ABSTRACT**

Figure toy torso, having same appearance when viewed from either the front or the rear, is rotatably connected to trunk along a 45° planar surface so that figure toy is converted from standing position to a sitting position by rotating torso 180° placing trunk normal to torso. A head is rotatably connected to torso and is turned to face the front of doll after rotation of torso.

2 Claims, 8 Drawing Figures



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SHEET 1 OF 2

FIG. 1

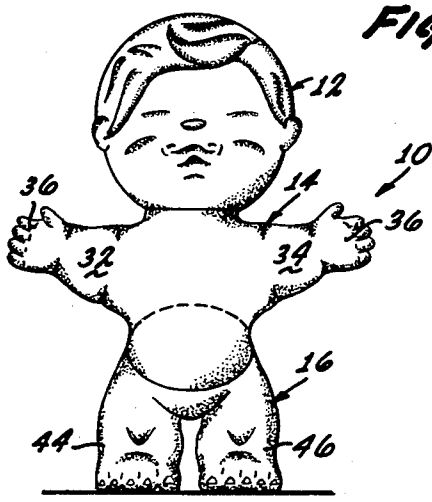


FIG. 2

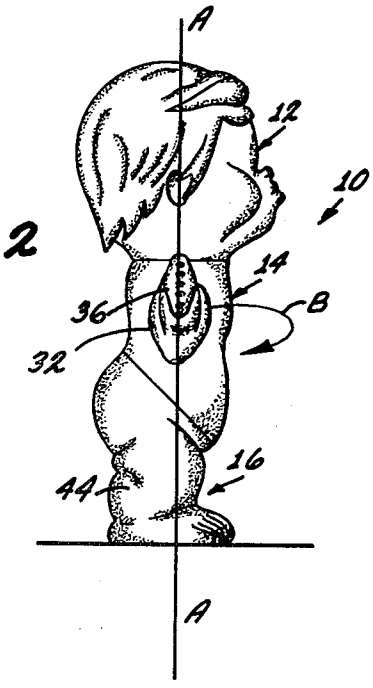


FIG. 3

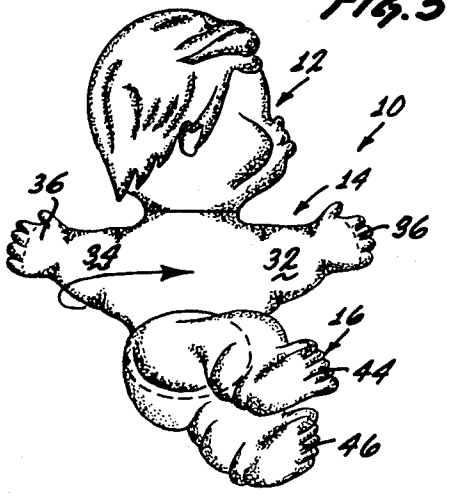
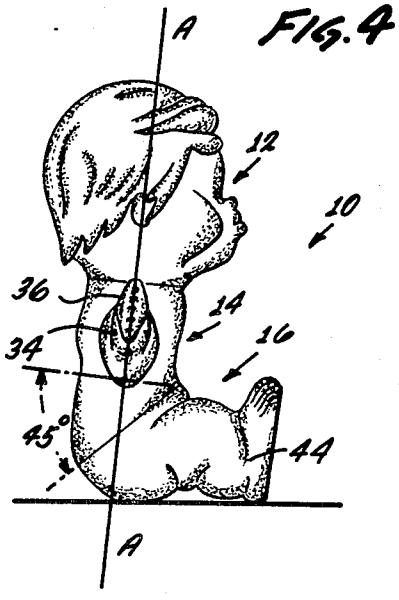


FIG. 4



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FIG. 5

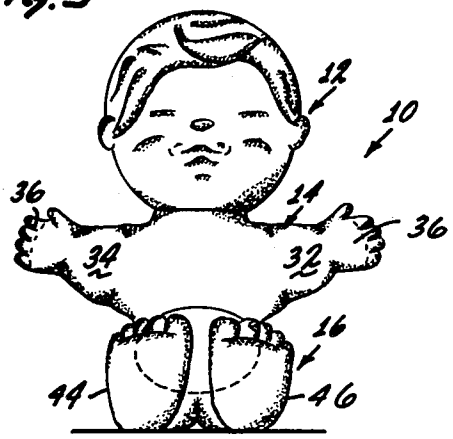
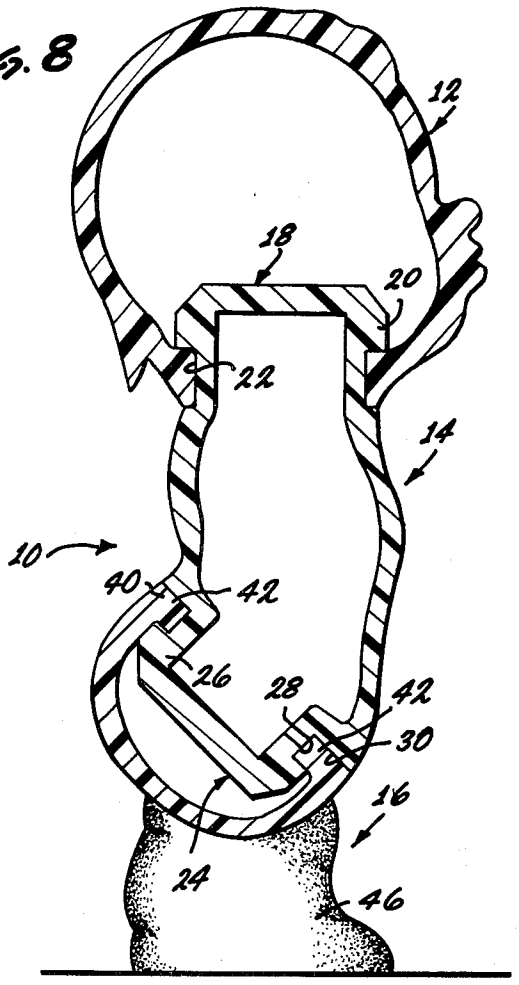


FIG. 8



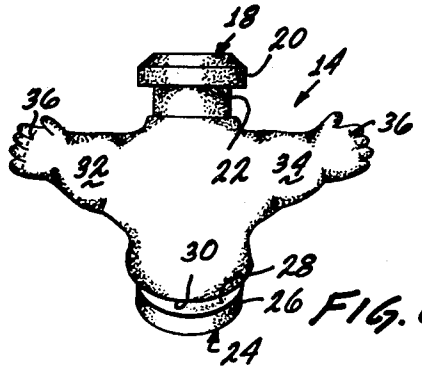


FIG. 6

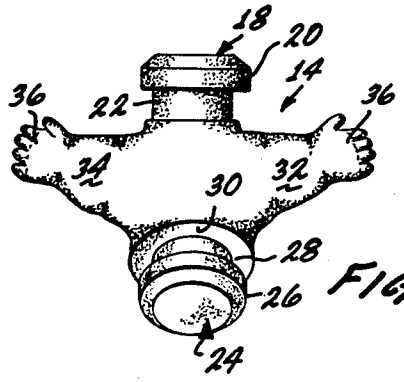


FIG. 7

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JOINTED FIGURE TOY HAVING COOPERATING BEARING SURFACES OF DUPLICATE SIZE AND CONTOURS

BACKGROUND OF THE INVENTION

The background of the invention will be set forth in two parts.

FIELD OF THE INVENTION

The present invention pertains generally to the field of figure toys of the type having cooperating bearing surfaces of duplicate size and contours between major body parts and more particularly to such a figure toy which includes a torso having the same appearance when viewed from either the front or the rear.

U.S. Pat. No. 1,345,052 is an example of a jointed figure toy having cooperating bearing surfaces of duplicate size and contours so that portions of the body of the figure toy may be rotated relative to each other to transform the figure toy from a position where the toy is capable of standing on all four feet to a position where the toy stands on its rear feet with the front feet extending vertically upwardly. Other portions of the body may also be rotated in such a manner that the figure toy appears to be standing on its front feet with its rear feet extending rearwardly in an elevated position

SUMMARY AND OBJECTS OF THE INVENTION

It is a primary object of the present invention to provide a new and useful jointed figure toy having cooperating bearing surfaces of duplicate size and contour.

Another object of the present invention is to provide a figure toy of the type described including a torso having the same appearance when viewed from either the front or the rear and means rotatably connecting the torso to a trunk portion along a 45° planar surface so that the figure toy is converted from a standing position to a sitting position by rotating the torso 180°.

According to the present invention, a figure toy is provided which includes a torso having the same appearance when viewed from either the front or the rear. The torso includes an upper end having a neck plug and a lower end having a planar surface forming an angle of 45°with a horizontal plane.

The figure toy also includes a trunk portion having an upper planar surface which also forms an angle of 45°with a horizontal plane and which is adapted to rotatably engage the lower planar surface on the torso.

The trunk includes a pair of legs having a major axis which may be aligned with the major axis of the torso when the torso and trunk are placed in a first rotated position with respect to each other. Upon a 180°rotation from this position, the major axis through the legs is normal to the major axis through the torso so that the figure toy will assume a sitting position with the head of the figure toy facing backward. The head may then be rotated on the neck plug to a forward-facing position.

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 use, 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.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front elevational view of a figure toy of the present invention in a standing position;

FIG. 2 is a side elevational view of the figure toy of FIG. 1;

FIG. 3 is a front elevational view of the figure toy of FIG. 1 with its head and trunk portion rotated 90°-counter-clockwise from the FIG. 1 position;

FIG. 4 is a view similar to FIG. 3 showing the figure toy of FIG. 1 after the torso has been rotated 90°-clockwise;

FIG. 5 is a front elevational view of the figure toy of FIG. 4;

FIG. 6 is a front elevational view of the torso of the figure toy of FIG. 1;

FIG. 7 is a rear elevational view of the torso; and

FIG. 8 is an enlarged, cross-sectional view of the figure toy in its FIG. 2 position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring again to the drawings, a figure toy constituting a presently preferred embodiment of the invention, generally designated **10**, includes a head **12**, a torso **14**, and a trunk **16**.

Referring now more in particular to FIGS. **6 – 8**, torso **14** includes an upper end **18** provided with a neck plug **20** having an annular groove **22** rotatably receiving head **12**. Torso **14** also has a lower end **24** provided with a trunk plug **26** having an annular groove **28** rotatably receiving trunk **16**. Groove **28** includes an upper shoulder **30** comprising a planar surface forming an angle of about 45°with a horizontal plane passing through torso **14**.

Torso **14** includes a pair of arms **32, 34** formed integrally therewith and extending laterally outwardly therefrom. A hand **36** is formed on the end of each arm **32, 34** and arms **32, 34** and hands **36** have the same appearance when viewed from the front, as in FIG. **6**, and from the rear, as in FIG. **7**.

Trunk **16** includes an upper end **40** provided with an annular planar surface **42** forming an angle of about 45°with a horizontal plane passing through trunk **16**. A pair of legs (FIG. **1**) **44, 46** depend from trunk **16** and are adapted to support figure toy **10** in a standing position when head **12**, torso **14** and trunk **16** are arranged in the position shown in FIGS. **1, 2** and **8**. Legs **44, 46** are adapted to extend from figure toy **10** normal to the major axis *a—a* of figure toy **10** when the parts are arranged as shown in FIG. **4**.

Figure toy **10** may be converted from the position shown in FIG. **2** to the position shown in FIG. **4** by rotating torso **14** 180°counterclockwise in the direction of arrow B (FIG. **2**). Alternatively, head **12** and trunk **16** may be rotated 90°counterclockwise from the position shown in FIG. **1** to the position shown in FIG. **3**. Figure toy **10** will then assume the position shown in FIG. **4** upon rotation of torso **14** 90°clockwise (as viewed in FIG. **3**).

While the particular figure toy herein shown and described in detail is fully capable of attaining the ob-

jects 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, which form a part of this disclosure.

What is claimed is:

1. In a figure toy having sections which may be rotated upon each other 180° without destroying the continuity of the surface of the figure, the improvement comprising:

a normally upright unitary torso having simulated arms fixed thereto and extending laterally therefrom, said torso also having a front side and a rear side, opposite sides of said arms being configured to have the same appearance when viewed from either said front side or said rear side;

a unitary trunk including a hip portion and legs fixedly extending from said hip portion; and

means pivotally connecting said torso and trunk together on an axis making a predetermined acute angle to said torso, whereby said figure toy may be converted from a standing configuration to a sitting configuration by rotating said trunk and torso 180° with respect to one another.

2. A figure toy, comprising:

a normally upright torso having a lower planar surface forming an angle of about 45° with a horizontal plane;

a pair of arms fixed to said torso and extending laterally from opposite sides of said torso, opposite sides of said arms being similarly configured and having the same appearance when viewed from the rear as when viewed from the front;

a trunk having an upper planar surface forming an angle of about 45° with said horizontal plane;

means rotatably connecting said torso and trunk together about an axis transverse to said planar surfaces, whereby rotation of said torso and trunk 180° with respect to each other from an aligned position places said torso and trunk normal to each other; and

a head rotatably mounted on said torso.

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