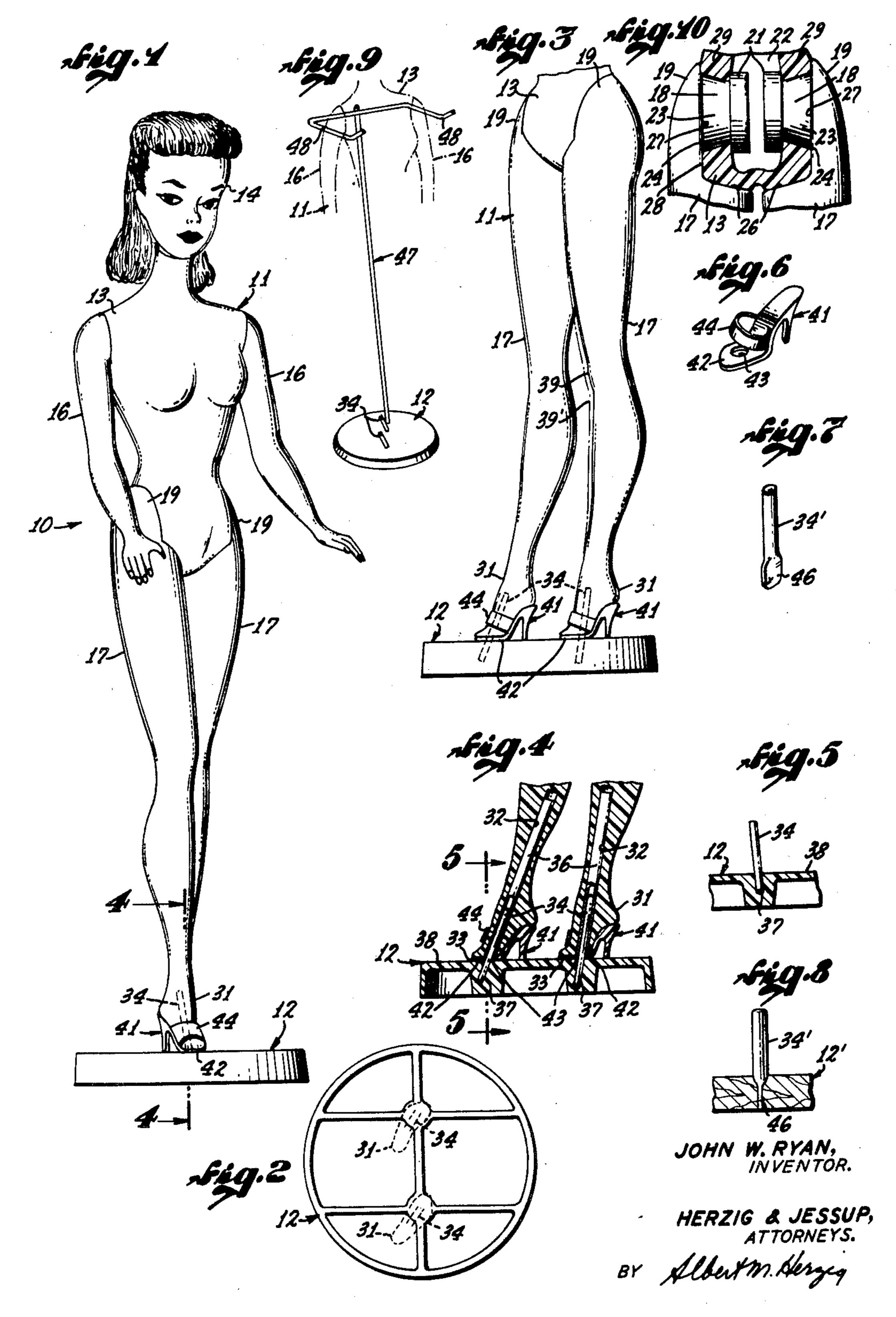
J. W. RYAN

DOLL CONSTRUCTION

Filed July 24, 1959



Patented Nov. 21, 1961

•

3,009,284

DOLL CONSTRUCTION

John W. Ryan, 11027 Cashmere St., Bel Aire, Calif.

Filed July 24, 1959, Ser. No. 829,459

1 Claim. (Cl. 46—32)

This invention relates to a doll construction and more particularly to a construction by which a doll may be supported in a balanced, realistic position when not in use or when on display.

This invention provides a doll having a body and limbs in articulated relationship and means for supporting the doll in an upright or standing position for display or for

storage.

A base is provided having a pair of pins telescopically engageable within longitudinal bores extending into the legs of a doll, the pins being angularly displaced from a perpendicular to the base, and angularly displaced to each other so as to automatically bias the limbs of a doll in a position to hold the body erect. The bores extending into the legs of the doll are angularly displaced to each other so that when one leg is telescopically engaged with one pin, the bore of the other leg is angularly displaced from the other angular pin, necessitating flexing of the other leg to align the bore with the pin, thereby creating a bias within the limbs which biases the doll into the desired erect balanced position.

An object of this invention is to provide a new and improved doll construction in which a doll having a body and articulated limbs may be supported in an erect posi-

tion while being stored or displayed.

Another object of this invention is to provide a new and improved doll construction in which engagement of the doll with its base automatically positions the doll's body and legs into proper relationship to the base.

It is another object of this invention to provide a new and improved doll construction in which the doll is easily and readily mounted on the base and removed therefrom.

It is an object of this invention to provide a new and improved doll construction of the character described 40 which is economical to manufacture and capable of mass production.

A further object of this invention is to provide a doll construction of the character described in which engaging parts are protected from wear due to constant mounting 45 and dismounting of the doll from the base.

These and other objects of this invention will be more readily apparent from the following detailed description, drawings and appended claims.

In the drawings:

FIGURE 1 is a front-side view, in elevation, of a doll designed and constructed in accordance with this invention.

FIGURE 2 is a bottom view of the base thereof;

FIGURE 3 is a fragmentary side view, in elevation, as ⁵⁵ taken from the right side of FIGURE 1;

FIGURE 4 is a vertical cross-sectional view, as taken substantially along a line 4—4 of FIGURE 1;

FIGURE 5 is a vertical, cross-sectional view taken substantially along the line 5—5 of FIGURE 4, with the 60 doll omitted for greater clarity;

FIGURE 6 is a perspective view, in elevation, of a shoe means incorporated within this invention;

FIGURE 7 is a perspective view, in elevation, of a modified embodiment of pin means employed in the base; 65

FIGURE 8 is a vertical, cross-sectional view illustrating the use of the pin means of FIGURE 7; and

FIGURE 9 is a perspective view, in elevation, illustrating a modified form of base means.

FIG. 10 is a detail view showing the attachment of the limbs to the body of the doll.

2

Referring to the drawings, and more particularly to FIGURES 1 through 6, there is shown, by way of illustration, but not of limitation, a combination 10 of a doll 11 and a base 12 designed and constructed in accordance with this invention. The doll 11 may take any desired form, human or animal, and is illustrated herein as a female human figure having a body 13, a head 14, and plurality of limbs secured to the body 13 in articulated relationship, such as pairs of arms 16 and legs 17.

The legs 17 are preferably formed of a relatively flexible, resilient material, such as a soft plastic, rubber neoprene. or the like, each of the legs 17 having an inwardly extending boss secured to or integral with the upper and 19 thereof. Each of the bosses 18 includes an annular flange 21, residing within a hollow interior 22 of the body 13. and a frustro-conical shank portion 23 residing in complementary aligned bores 24 of the body 13. Each leg is cut out as indicated at 26 to provide vertical, relativelyflat faces 27 bearing against flat outer surfaces 28 of the body. The distance between the inner surface of the flanges 21 and the surfaces 27 is preferably slightly less than the thickness of the wall 29 on each side of the body forming the cavity 22, whereby the legs 17 have a tight connection to the body to resist pivotal articulated movement of the limbs relative to the body 17. In this manner, angular position of the limbs, relative to the body 13, is retained after being set.

Each arm 16 is preferably hingedly secured to the body 13 in a similar fashion to assist in clothing the doll and for facilitating adjustment of the center of gravity of the

doll for balancing purposes.

The other end 31 of each leg 17, the foot portion in this instance is provided with longitudinal blind bores 32 extending through the legs and communicating with the bottom surfaces 33 of each foot for telescopic engagement with upwardly extending pins 34 secured in a base 12. The bores 32 are preferably lined with tubular members of metallic or other suitable material, indicated at 36, to provide improved sliding engagement for insertion of the pins 34 into the bores and to reduce the wear and consequent enlargement of the bores due to constant insertion and withdrawal of the pins 34 from the bores.

The base 12, preferably formed or molded of a relatively-rigid plastic material, has embedded therein bases 37 of the pins 34 in any suitable manner. Each pin 34 is angularly disposed relative to the other pin 34 and angularly disposed to a perpendicular to the upper surface 38

of the base 12.

The bores 32 are angularly displaced relative to each other, so that when one pin is inserted in the bore 32 of one leg, the other bore 32 of the other leg 17 is slightlyangularly displaced from the other pin 34. To align one bore 32, or its sleeve 36, with the other pin 34, the other leg 17 is manually or otherwise bent inwardly as at the knee portion 39 from a normal position indicated in the broken lines 39', after which the remaining pin 34 may be inserted into the bore 32. Upon release of the manual pressure on the knee portion 39, the leg 17 is biased to attempt to resume its normal position, some of the bias being transmitted to the other leg 17, thereby biasing both legs 17 into aligning themselves with the angular relationship of the pins 34. By selectively positioning the pins 34 in the angular relationship illustrated herein, the legs 17 and the body 13 are automatically positioned into a position wherein both toes are pointing in parallel planes, as best seem in FIGURE 2. The body may be twisted by manual force relative to the base and when released will automatically resume its position wherein both toes are pointed in parallel planes.

The base 12 is preferably of sufficient size and weight to retain the balance of the doll in its upright position and

3

yet permit positioning of the arms 16 in any desired position.

To add further realism to the instant embodiment, a shoe means, generally designated by the numeral 41, is provided, wherein each shoe has a sole portion 42 conforming to the under side 33 of each leg 17 and is provided with a bore 33 extending through the sole. When the shoes 41 are held onto the foot 31 of each leg as by straps 44, the legs 17 may be telescoped over the pins 34 without removal of the shoes, the pins 34 extending through the 10 apertures 43.

FIGURE 7 illustrates a modified form of pin structure 34' wherein an elongate rod is flattened as at 46 to facilitate embedding the pin 34' in a base 12' formed of wood

or other similar penetrable material.

If desired, the pins 34 may be made removable from the base 12 and an elongated standard 47 may be provided, the standard being insertable into an aperture of the base 12 to replace a pin 34, or optionally anchored within the base 12 in addition to the pins 34. The standard 47 is provided with a pair of spaced hook members 48 which are engageable as under the armpits formed at the junctions of the arms 16 with the body 13, to support the body 13 independently of the pins 34, if desired, as illustrated in broken lines in FIGURE 9.

While I have herein shown and described my invention in what I have conceived to be the most practical and preferred embodiments, it is recognized that departures may be made therefrom within the scope of my invention, which is not to be limited to the details disclosed herein, but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices and methods.

What I claim as new and desire to secure by Letters

Patent is:

A doll construction, comprising: a body; a pair of limits secured to said body in articulated relationship; each of said limbs being hinged at one end thereof to said body; means defining a longitudinal bore extending through the other end of each of said limbs; a base; a pair of pins secured to said base and extending upwardly therefrom, each of said pins being angularly displaced from a plane perpendicular to said base and engageable within said bores of said limbs so as to position said limbs and said 15 body in a preselected position for balancing the doll on the base, said limbs being formed of a flexible, resilient material, and means for resisting articulated motion between said limbs and said body, one of said longitudinal bores being angularly disposed relative to one of said pins, when the other of said pins is in telescopic engagement with the other of said bores.

References Cited in the file of this patent UNITED STATES PATENTS

5.	2,884,739	Ketcham May 5, 19 FOREIGN PATENTS	959
	18,419 1.128.705	Great Britain 1 France Aug. 27, 1	889 9 5 6

4