

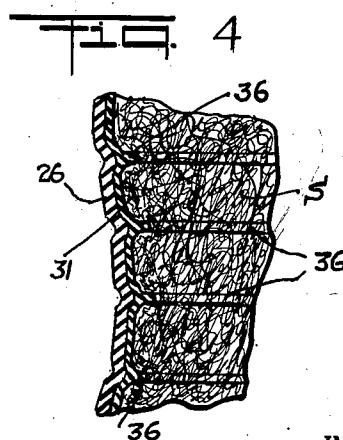
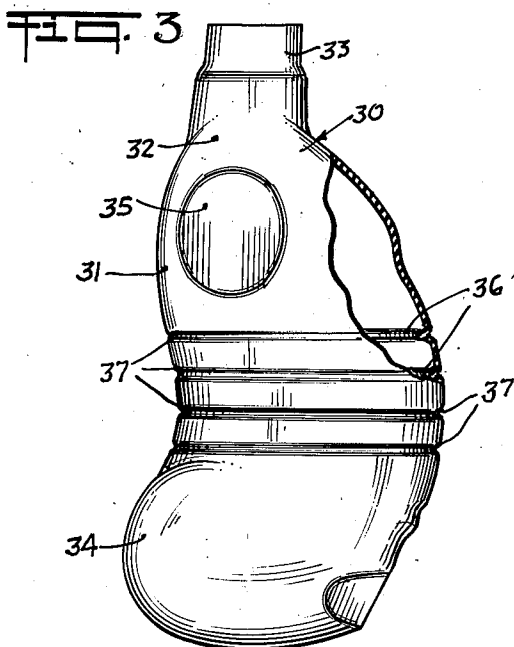
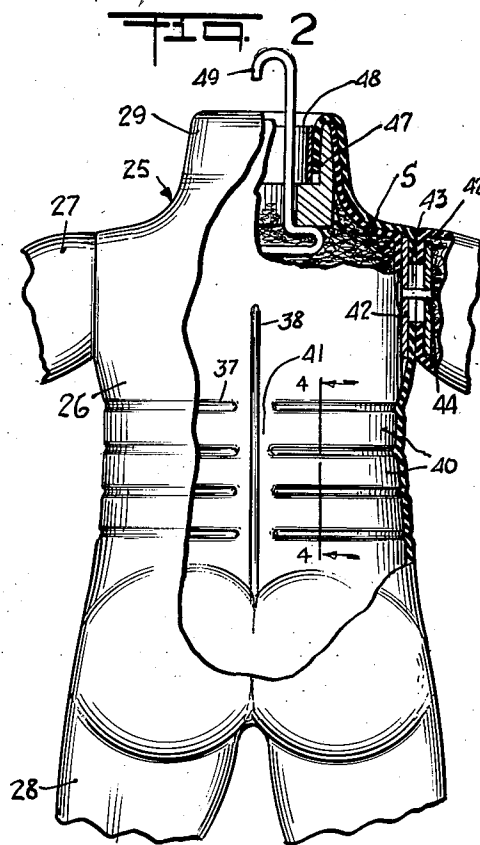
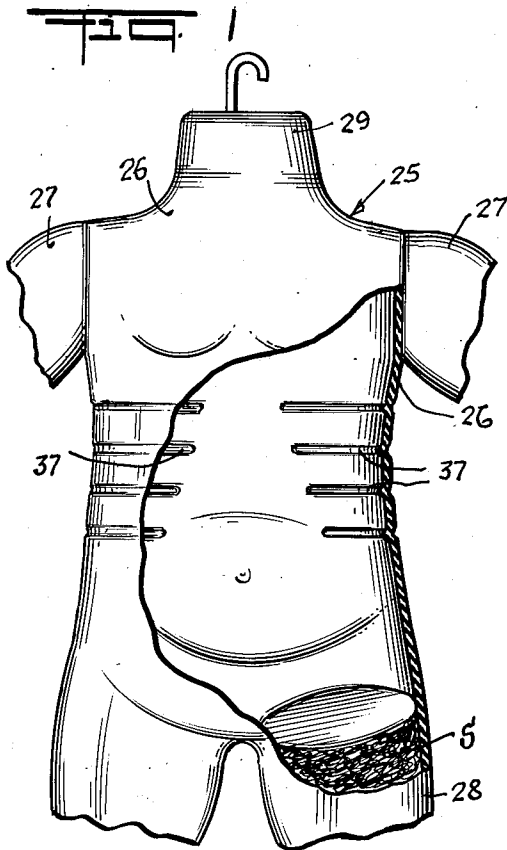
Dec. 23, 1952

C. L. BEAL

2,622,369

DOLL BODY CONSTRUCTION

Filed June 23, 1948



INVENTOR.
Carl L. Beal

BY *Mock & Blum*

ATTORNEYS

UNITED STATES PATENT OFFICE

2,622,369

DOLL BODY CONSTRUCTION

Carl L. Beal, Garden City, N. Y., assignor to Ideal Latex Corporation, Hollis, N. Y., a corporation of New York

Application June 23, 1948, Serial No. 34,769

1 Claim. (Cl. 46—162)

1

My invention relates to a new and improved doll and is a continuation-in-part of my co-pending application Serial No. 794,223, filed December 29, 1947, now Patent #2,554,001.

An object of my invention is to provide a doll which has a hollow and resilient and bendable body, and which is provided with an internal resilient and bendable stuffed insert of such construction as to give the effect of a life-like rib and vertebra structure when the doll is held and squeezed.

Further objects and advantages of my invention are stated in the annexed description and drawings which illustrate a preferred embodiment thereof.

Fig. 1 is a front elevation of the doll with a portion of the front wall of the doll-body cut away to show the stuffed insert, the arms and legs being cut away for convenience of illustration;

Fig. 2 is a rear elevation of the doll shown in Fig. 1, partially in vertical section, a portion of the rear wall being cut away to reveal the stuffed insert;

Fig. 3 is a side elevation of the doll insert shown unstuffed, a portion of the front wall being cut away; and

Fig. 4 is a section along the line 4—4 of Fig. 2.

The drawings are substantially to scale and reference is made thereto as part of the disclosure.

Referring in detail to the drawings, a hollow doll body 25 is shown having a stuffed insert 30. The insert 30 is filled with a suitable stuffing and is provided with an arrangement of ribs and recesses so arranged that when the doll is grasped, the ribs and stuffing combine to produce the extremely life-like effect of an internal rib and backbone structure which can be felt through the flexible outer walls of the doll-body. The outer hollow doll-body 25 is made of a bendable and resilient material such as vulcanized rubber, plastic, etc. Said doll-body is provided with a hollow torso 26, integral hollow legs 28 and a pair of attached hollow arms 27. Said doll-body 25 is provided at the top with a neck 29. The torso 26 is preferably integral with the legs 28, which legs are filled with a suitable stuffing S such as kapok, cotton, sponge rubber or the like. In the view shown in Figs. 1 and 2, the arms 27 are separate members and are pivotally attached to the torso 26 as will be presently described. The arms 27 are also filled with the stuffing S. The doll-body 25 can be made by dipping the form into latex, vulcanizing and stripping. The torso 26 of the

2

doll-body 25 may be integral with both arms 27 and legs 28, or either or both of said limbs may be separate members and attached to said torso by any suitable means. The hollow insert 30 is also made of a flexible and resilient material which may be vulcanized rubber, plastic or the like. This insert 30 has a body 31, a shoulder portion 32, a neck 33 and a lower trunk portion 34. Said insert has the general configuration of a human torso, circular flat portions 35 being provided at that portion of the body 31 which will be adjacent the arms 27 when the insert 30 is placed within the doll-body 25.

The insert 30 is provided with a series of internal ribs 36. Each said internal rib 36 is aligned with an outer recess in the respective wall of insert 30. Said outer recesses 37 are preferably formed in the dipping process heretofore described and take the form of distinct lines of scoring or grooves in the flexible outer walls of insert 30. As shown in Figs. 1, 2 and 3 these ribs and grooves are arranged in a definite pattern. The side walls of the insert 30 are provided with a series of spaced parallel grooves 37, said grooves extending horizontally from a point adjacent the center of the rear wall of said insert to a designated point on the front wall. As shown in Fig. 1, the ends of each pair of opposed grooves 37 are sufficiently spaced from each other on the front wall of insert 30 to provide a smooth convex front surface for said insert. These surfaces serve as the stomach portion of the insert 30. At the center of the rear wall of insert 30, a single longitudinal or vertical groove 38 is provided. Said groove 38 extends for an appreciable distance above and below the series of horizontal grooves 37, as shown in Fig. 1.

The insert 30, being made of flexible material, can be folded and thus easily fit into the doll-body 25 through the neck 29 of said doll-body. When placed in its fitted position, the trunk portion 34 of the insert abuts the corresponding trunk portion of the doll-body. Similarly, the shoulder portion 32 of said insert abuts the shoulder portion of doll-body 25 and fits snugly there-against.

The insert 30, after being fitted into the doll-body 25, is filled with the yieldable stuffing S. When so stuffed, the portion of the walls of said insert between each of the horizontal grooves 37, and between the vertical groove 38 and the adjacent ends of said horizontal grooves 37, protrude, forming a series of ridges designated in the drawings as 40 and 41 respectively.

The doll-body 25 and the insert 30 are of such

3

relative dimensions that the center and waist portions of said doll-body fit loosely over the corresponding portions of the stuffed insert 30. By means of this construction, the ridges 40 between grooves 36 protrude from the pressure of the resilient stuffing S, but are not readily visible through the walls of the outer doll-body 25. Said doll-body is of sufficient size to allow the walls thereof to cover ridges 40 without assuming their form. When the doll is grasped, however, the protruding ridges can be felt through the walls of said outer doll-body 25. In a similar fashion, the vertical or longitudinal ridge 41 can be felt. Thus, the doll is provided with a loose and flexible smooth outer wall resembling the skin of a human, but when grasped around the center produces a realistic sensation.

Since the insert 30 is stuffed to provide a firm inner foundation for the doll-body 25, it is possible for the limbs of said doll to be pivotally attached.

Referring to Fig. 2, this pivotal attachment is achieved by the provision of a pair of aligned washers 42 located adjacent each other at the juncture point of the arm with the torso 26 of the outer doll-body 25. One of said washers 42 abuts an inner wall of the upper end of the arm 27, while the other washer is located between the wall of outer doll-body 25 and the circular flat portion 35 of insert 30. Each washer is provided with a centrally disposed hole 43. Through each said hole 43, a double-headed pin 44 is inserted, with the effect that the arm 27 is freely rotatable about said pin in a plane parallel to the longitudinal plane of the doll-body 25. It is to be understood that the invention is not to be limited to a pivot connection for the limbs but that said limbs may be attached in any convenient manner or may be integral with the doll-body.

As shown in Fig. 3, the neck portion 33 of insert 30 is provided with an open upper portion of slightly smaller diameter than the lower portion thereof. The neck portions 29 and 33 are cut of such relative lengths that when the insert 30 is fitted within the doll-body 25, the neck portion 29 of said doll-body projects above the neck portion 33 of said insert. A cylindrical member 47 is then inserted in the open upper end of said neck openings, the outer periphery of said cylindrical member 47 being adjacent the inner peripheral wall of neck portion 33. The upper portion of neck 29 of doll-body 25 is then bent inwardly and downwardly into the neck recess until said portion is adjacent the inner peripheral surface of the cylindrical member 47, as shown in Fig. 2.

A second cylindrical member or ring 48 of a smaller diameter than the cylindrical member 47 is then inserted into the neck recess. This ring 48 is of sufficient diameter to frictionally clamp together the neck portions of the insert and doll-body and the cylindrical member 47. The said cylindrical member 47 is provided to afford rigidity and stability to the neck portion of the doll. In addition, said member 47 supports a hook 49 or similar means of attaching a doll's head to the neck. The presence of the stuffing

4

S prevents said member 47 from slipping down into the insert 30.

While I have shown a preferred embodiment of my invention, it is clear that numerous changes, additions and omissions can be made without departing from its scope.

I claim:

A doll which has an outer body having a hollow and bendable and resilient and unstuffed torso portion simulating a human torso, said torso portion having side walls, a front convex wall, a bottom wall, a rear wall, and an open neck, a bendable and resilient insert member located within said torso portion, said insert member substantially conforming in shape to said torso portion and being stuffed with a soft and yieldable material, said insert member having a bottom wall which abuts the bottom wall of said torso portion and an open neck which interfits with the neck of said torso portion, said insert member having front, rear, and side walls a portion of which are spaced internally from the respective front, rear, and side walls of the torso portion, said insert member being sufficiently bendable to be inserted through the neck of said torso portion into assembled relation therewith, the side walls of said insert member having respective series of parallel, transverse external grooves at the mid-section thereof, the rear wall of said insert member having a longitudinal groove which is spaced from the series of transverse grooves, the respective walls of said insert member and said torso portion being spaced in the vicinity of said ribs, said insert member being filled with sufficient stuffing to enable the resilient wall of said insert member to protrude between said grooves, said protrusions respectively simulating the rib and vertebrae structure of a human body, the respective walls of said insert member and said torso portions being spaced a sufficient distance at the vicinity of said protrusions to prevent said protrusions from being seen from the outside of said doll body, but to enable said protrusions to be felt when the torso portion of said doll body is grasped, and a pair of rigid rings which interfit with one another to clamp together the respective interfitted neck of said insert member and said torso portion, the top edges of said necks being folded over one of said rings and extending between said rings.

CARL L. BEAL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
853,639	Hincks	May 14, 1907
2,027,225	Gill	Jan. 7, 1936
2,027,290	Reach	Jan. 7, 1936
2,089,376	Jacobson	Aug. 10, 1937
2,181,325	Greneker	Nov. 28, 1939
2,554,001	Beal	May 22, 1951

FOREIGN PATENTS

Number	Country	Date
8,118	Great Britain	June 1, 1915