

[54] APPLIABLE DOLL DECORATIONS

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[58] Field of Search 46/DIG. 1, 157, 22, 46/116; 206/46, DIG. 18, 56 AB; 229/48 SB

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Primary Examiner—Louis G. Mancene

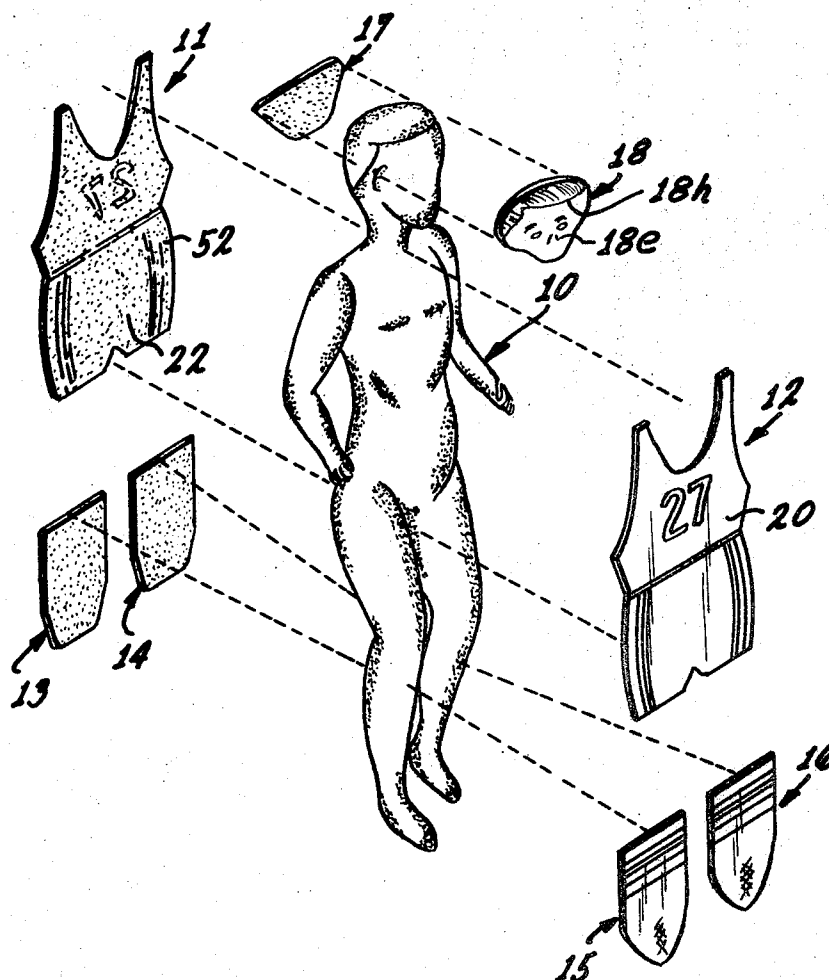
Assistant Examiner—D. L. Weinhold

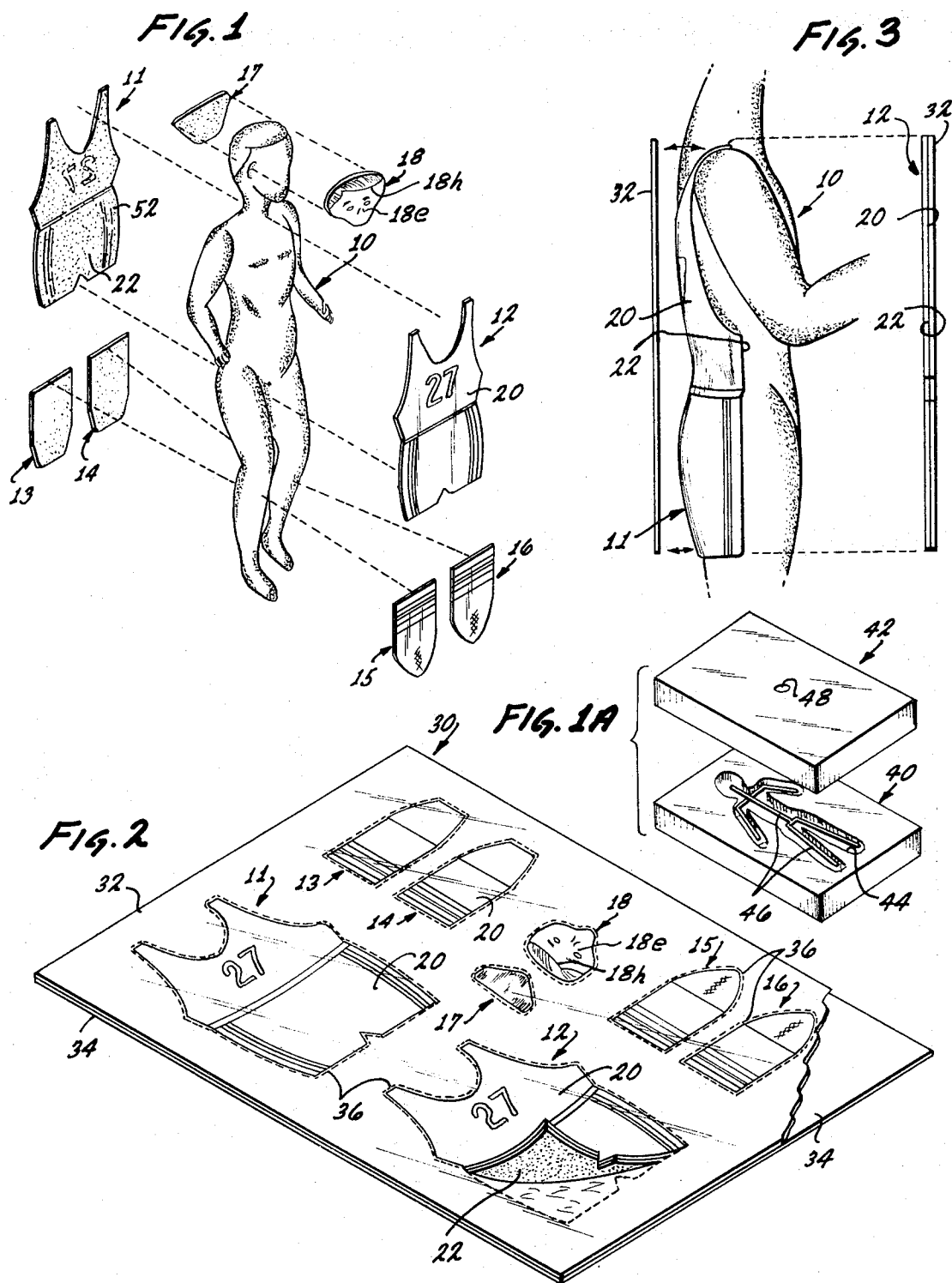
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[57] ABSTRACT

A doll construction kit which enables a child to mold a three-dimensional doll and decorate it will pre-printed labels so that the doll has an attractive appearance similar to that of a doll wholly constructed at a factory. Preprinted labels defining clothing and defining facial and hair features are provided for application by a child to a doll he has molded, the labels being constructed of a rubber-like material so they can stretch when applied to a contoured doll surface, to eliminate wrinkles. They will also stretch when doll is posed in various positions.

6 Claims, 13 Drawing Figures





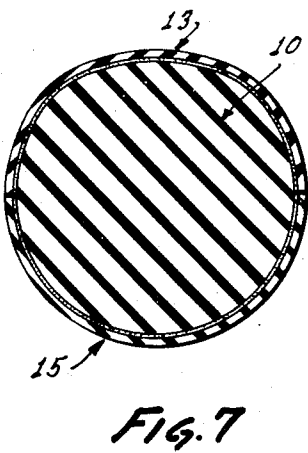
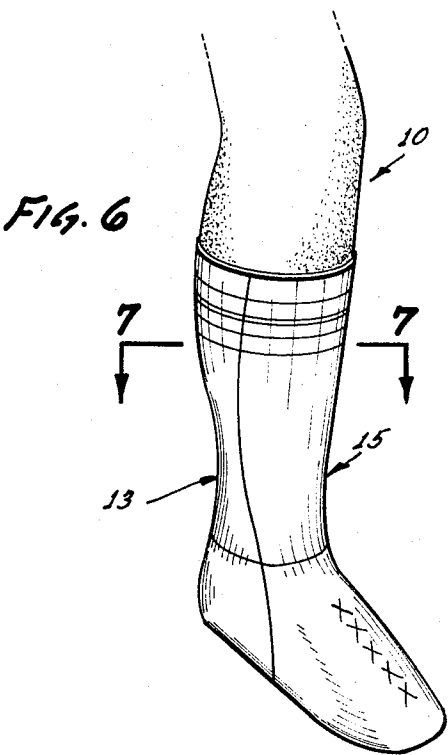
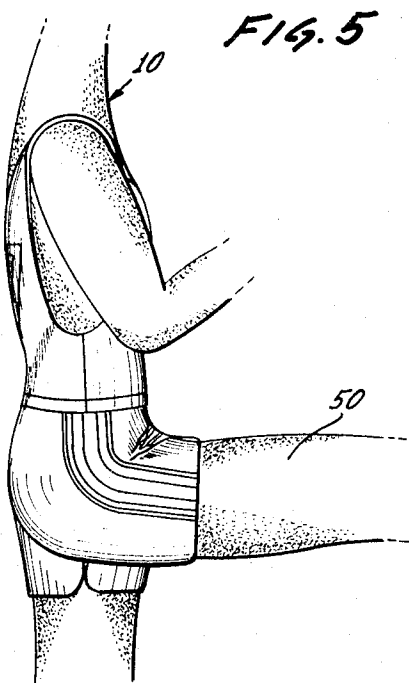
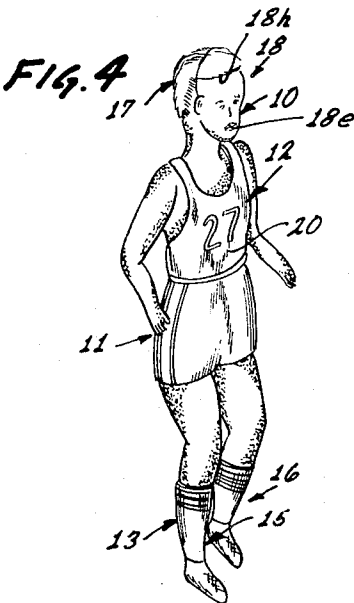


FIG. 8

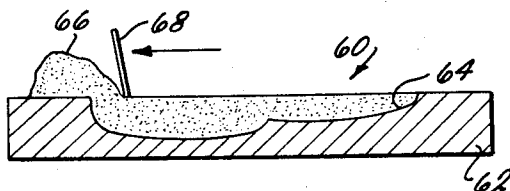


FIG. 9

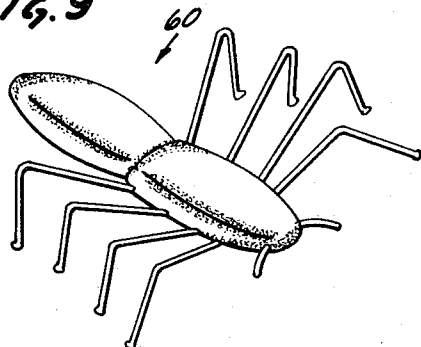


FIG. 12

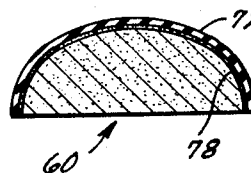


FIG. 11

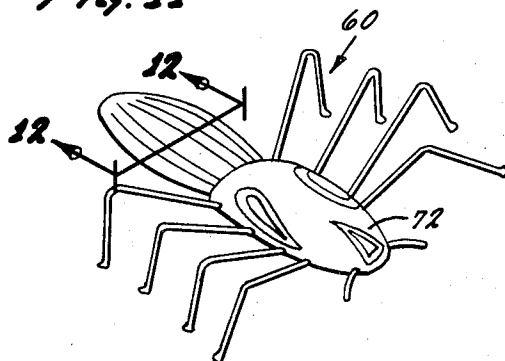
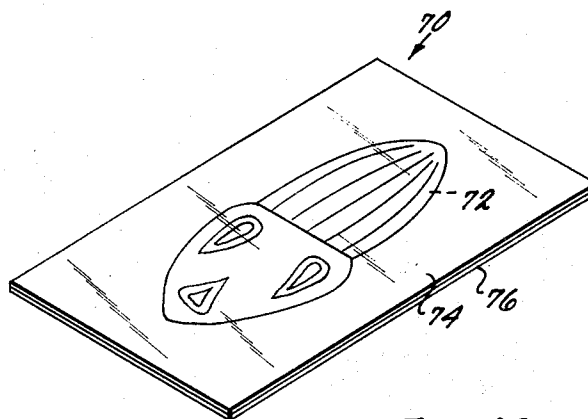


FIG. 10



APPLIABLE DOLL DECORATIONS

BACKGROUND OF THE INVENTION

This invention relates to toy construction apparatus for construction and decoration of dolls and other figures.

Toy kits for constructing dolls and other figures have long been available in two-dimensional versions, wherein children cut figures from cardboard and apply paper clothes over them. A highly entertaining kit is provided by a molding set that enables children to mold contoured, or three-dimensional figures and decorate them. Molds can be supplied that enable children to accurately form figures to the required shape, but it is difficult to provide means for enabling children to decorate such figures to represent facial and hair features as well as clothing. Children cannot paint accurately enough, while decoration labels heretofore available could not be applied to a contoured surface without excessive wrinkling.

SUMMARY OF THE INVENTION

In accordance with one embodiment of the present invention, a toy construction apparatus is provided which enables a child to decorate a contoured doll figure in an attractive manner. The apparatus includes a group of labels of thin rubber-like material which can be readily applied to a contoured doll surface so that the labels can stretch to follow compoundly curved surfaces of the doll figure without wrinkling. The labels have front faces that are preprinted to represent colorful clothing and to represent facial and hair features, and have back faces covered with an adhesive that can hold them tenaciously to a doll surface. The labels are held between front and back protective sheets which can be stripped away when the labels are to be applied to a doll figure. In order to facilitate handling of the thin labels that have adhesive thereon, the backing sheets and the adhesive on the back of the labels are chosen so that when the backing sheets are peeled apart the labels stick to the front sheet. The adhesive on the back face of the label is thus exposed, and a doll figure can be pressed against the back of the label to begin the application. When the doll figure is lifted from the front protective sheet, the label comes away with the doll figure, and the label can then be pressed and smoothed over the doll contours so that there are minimum wrinkles in the label and the doll is attractively decorated. Apparatus is provided to enable a child to mold a flexible doll figure, and the adhesive which holds the label to the doll is also rubber-like so it will not crack when the doll flexes after the label is applied.

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

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded view of a doll and label set of the invention, showing the manner in which the doll figure is decorated by the labels;

FIG. 1A is a perspective view of a portion of an injection molding kit that enables a child to form the undecorated doll figure of FIG. 1;

FIG. 2 is a perspective view of the labels of FIG. 1 in a sheet arrangement, showing the package in which they are originally supplied;

FIG. 3 is a partial view of the doll figure and labels of FIG. 1, showing the manner in which the labels are applied to the doll figure;

FIG. 4 is a perspective view of the doll of FIG. 1 with all the labels applied thereon;

FIG. 5 is a partial view of the doll of FIG. 4, but with the doll posed in a different position;

FIG. 6 is a partial view of the doll of FIG. 4;

FIG. 7 is a view taken on the line 7-7 of FIG. 6;

FIG. 8 is a sectional side view of molding apparatus constructed in accordance with another embodiment of the invention;

FIG. 9 is a perspective view of a toy figure constructed with the apparatus of FIG. 8;

FIG. 10 is a perspective view of a label designed for application to the toy figure of FIG. 9;

FIG. 11 is a perspective view of the toy figure of FIG. 9, with a label 10 applied thereon; and

FIG. 12 is a sectional view taken on the line 12-12 of FIG. 11.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 illustrates doll portions that can be assembled by a child to create a three-dimensional doll, that is, a doll with contoured surfaces, and wherein the doll is decorated in a highly attractive manner. The apparatus includes a contoured toy FIG. 10 and numerous labels 11-18 which can be applied to the toy figure to decorate it. The toy FIG. 10 is formed of flesh colored material that has not been decorated. The labels 17 and 18 provide attractively colored facial and hair features for the toy figure, while the labels 11-16 provide colored patterns representing attractive clothing for the toy figure. A toy kit is provided which includes molds which a child can use to form the toy FIG. 10, although factory-molded toy figures can be supplied. The toy FIG. 10 is preferably molded in a flesh-colored material so that labels are required only for clothing and for natural features which are not flesh colored.

If the toy FIG. 10 had a flat surface or had large regions of cylindrical or other uniform cross section, then labels of almost any thin flexible material could be applied to the doll without wrinkling. However, much of the doll surface is compoundly curved, that is, portions are curved simultaneously about more than one axis and may be portions of a sphere or other compoundly curved shape. In order to permit application of the labels to such compoundly curved surfaces, the labels are constructed of a thin rubber-like material so that they can stretch and closely follow the surface and can therefore be applied with little if any wrinkling. Sheets of a latex material with a thickness of less than five-thousandths inch can be used for the labels.

Each of the labels 11-18 has a front surface 20 which carries a colored imprinting defining a decoration, while the back surface 22 of each label carries a layer of adhesive 52 that holds it to the toy figure. A child can apply a label by pressing the middle of the back surface 22 against an appropriate region of the toy figure, so that the label is held in place by the adhesive. Then the child wraps the label onto the contoured doll surface, smoothing the side portions to eliminate wrinkles while assuring that all portions of the label are

firmly pressed against the doll surface. The thin resilient label material permits stretching to allow the labels to follow the compoundly curved doll contours without wrinkling.

The thin, stretchable labels would be difficult for a child to handle if they were not held by carrier apparatus, and the difficulty would be greatly increased if a child had to apply a thin coating of adhesive to the labels and then handle them prior to sticking them on the toy figure. FIG. 2 illustrates a label package 30 for facilitating handling and application of labels by a child. The package includes a front protective sheet 32, a back protective sheet 34, and the labels 11-18 disposed between the protective sheets. The labels are positioned with their front surfaces 20 disposed against the front protective sheet 32 and their back surfaces 22 with adhesive thereon disposed against the back protective sheet 34. The labels 11-18 are individual rather than portions of a sheet of label material, and the protective sheets have cut-out lines 36 extending around each of the labels.

In order to apply a label to the toy FIG. 10, a child first cuts out a portion of the label assembly 30 by cutting along a cut-out line 36. The cut-out line 36 is spaced a small distance outside the edge of a label, so that even if a child wanders slightly from the cut-out line he will not cut off any portion of the label. After cutting out a label region, the child strips away the portion of the back protective sheet 34 that lies over the adhesive on the label back face 22. The child then presses the doll against the adhesively-coated back face 22 of the label while a portion of the front protective sheet 32 remains on the front face 20 of the label to facilitate handling. With part of the label stuck onto the doll, the child pulls away the front protective sheet portion 32, leaving the label stuck onto the doll. The label is then smoothed over the doll surface to follow the doll contours without wrinkling. FIG. 3 illustrates the manner in which a label 12 that is held on a front protective sheet 32 is applied to the toy FIG. 10, and also shows removal of the front protective sheet 32 from another label 11 after the adhesively-coated back face of the label 11 has been applied to the toy figure.

The packaging assembly 30 facilitates handling of very thin and elastic labels which are the kind that can most easily follow doll contours without wrinkling. The back protective sheet 34 protects the adhesive until the label is to be applied, while the front protective sheet serves as a carrier which stiffens the label until it is stuck on the doll so that the label is never free of any stiffening support.

In order to permit stripping away of the protective sheets 32, 34 and application of the label to the doll in the manner described above, it is necessary that the protective sheets 32, 34 strip away from the label in a predetermined sequence. After a child has cut out a portion of the package 30 that contains one label, he may grasp the edges of the two protective sheet portions 32, 34 and pull them apart. The regions of the protective sheets 32, 34 outside of the label areas must not stick to one another, so that a child can readily grasp them to pull them apart. As the child pulls the two sheets 32, 34 apart, the front surface of the label must stick to the front protective sheet 34 so that the adhesive-coated back surface 22 of the label is exposed. This may be accomplished by utilizing a back protective sheet 34 covered with a waxy substance that

adheres to the adhesive on the back face 22 of the label with very low tenacity, and by utilizing a front protective sheet 32 that sticks to the label with greater tenacity. The toy FIG. 10 is constructed of a material which is held very tenaciously by the adhesive on the back surface 22 of the label, so that after the label is applied to the toy figure and the front sheet 32 is pulled away, the label always sticks to the toy figure. The labels 11-18 and the toy FIG. 10 can both be constructed of a latex material, while an adhesive for the back face 22 is chosen that adheres very strongly to such material.

The labels 17, 18 that define facial and hair features are constructed to facilitate the accurate location of such features on the toy FIG. 10. The decorations 18e representing the eyes must be accurately located with respect to the hairline 18h in order to provide a natural appearance. By forming the eyes and a portion of the hair on a single label, accurate relative location of these features is assured. The eyes and entire hair portion cannot be readily included in a single label because the highly curved head of the doll would make it difficult to apply without wrinkling. The additional label 17 representing the rear portion of the hair can be applied to overlap somewhat the hair portion of the label 18, without such overlapping being highly noticeable.

FIG. 1A illustrates molding apparatus supplied with the doll construction apparatus, which enables a child to mold the toy FIG. 10. The toy apparatus includes a toy injection molding machine (not shown) and a pair of molds 40, 42 with cavities 44 that define the toy figure. A child can make a poseable toy figure, such as a figure whose arms can be posed at different positions, by laying a soft wire armature 46 in the mold cavity 44 prior to closing the mold and injecting plastic through a spru hole 48 therein. A latex material can be injected so that the doll can easily flex, while the armature 46 tends to hold the doll at any position to which it is flexed.

FIG. 5 illustrates the flexing of the leg 50 of a decorated toy figure which may be originally formed in the configuration illustrated in FIGS. 1 and 4. When the toy FIG. 10 is bent, as shown in FIG. 5, the labels 11, 12 representing clothes that extend over the joint of the doll, must stretch, compress, or otherwise flex. The rubber-like characteristic of the label material not only permits application to a contoured surface without wrinkling, but also enables considerable bending of the doll without tearing of the label. In order to permit such bending, it is also necessary that the adhesive 52 which holds the label to the doll be highly flexible. Flexibility of the adhesive after it has been applied, is especially important where the dolls are poseable. However, such flexibility is also important where the doll is flexible, even if it is not poseable, because otherwise deflection permitted by the label and doll might crack the adhesive. An adhesive 52 of a type that adheres tenaciously to the label and toy figure material and which remains highly flexible after it dries or sets is therefore used.

FIGS. 8-11 illustrate another embodiment of the invention wherein provisions are made for forming a toy FIG. 60 representing a bug, and for decorating it with a label that represents body parts. The apparatus includes a casting mold 62 with a cavity 64 representing the shape of the toy figure 60. Material to be molded 66 is poured into the mold and the top of the mold is leveled with a scraper 68. After the molding material sets, the toy figure 60 is removed from the mold, ready

for decoration. A label assembly 70 is provided which includes a label 72 representing body parts of the toy figure, and which also includes protective sheets 74, 76 similar to those shown in FIG. 2. A child can apply the labels 72 to the toy figure 60 to create the completed creature illustrated in FIG. 11. It may be noted that one face of the figure is flat, so that not all portions are contoured or three-dimensional. However, the surface of the figure which can be seen when the figure is upright, is highly contoured and the flexible label 72 allows decoration of this surface in a neat and attractive manner. A material 66 used in casting the toy figure 60, is of a type which is flexible after it sets, although no armature is utilized to enable posing of the figure. After the label 72 is applied to the toy figure 60 and the resulting creature is played with, it may be bent and portions of it pressed in during play. To prevent cracking of the adhesive 78 that holds the label 72 to the toy figure 60, an adhesive 78 which is resilient after application is utilized.

Thus, the invention provides toy construction apparatus that permits a child to decorate a highly contoured surface, particularly one which is compoundly curved, in a neat and attractive manner. The apparatus includes labels constructed of a thin flexible material which is also highly resilient so it can stretch in closely following the contours of the toy figure. The label is held to the figure with an adhesive which remains resilient after the label is applied, so that if the figure surface is deformable the adhesive will not crack when the figure surface is deformed. Furthermore, the resilient label and adhesive can be applied to the joint region of a poseable toy figure, and the label and adhesive can then follow large changes in the doll configuration. The labels are supplied in a package that includes protective sheets covering both faces. A back protective sheet protects the adhesive until the label is ready for use, but is held with low tenacity by the adhesive so that it readily strips off, leaving the label held to the front protective sheet. The front protective sheet serves as a carrier for handling the label while it is applied to the toy figure. The adhesive on the back face of the label adheres tenaciously to the toy figure, so that after the label is applied to the toy figure and the front protective sheet is pulled away, the front sheet separates from the label so that the label remains on the doll. The labels can represent clothes, and also facial and hair features. Accurate location of the eyes with relation to the hairline

is encouraged by forming the front portion of the hair and the eyes as a single label or label region to be applied at one time. Another label representing the rest of the hair is provided to complete the hair decoration.

Although particular embodiments of the invention have been described and illustrated herein, it is recognized that modifications and variations may readily occur to those skilled in the art and consequently it is intended that the claims be interpreted to cover such modifications and equivalents.

What is claimed is:

1. In combination, a figure toy and decorative label means, comprising:

a toy figure having a compoundly curved outer surface; and

label means constructed of flexible and stretchable material and having a front face and a back face, decorative means provided on one of said faces and adhesive means provided on the other of said faces, said adhesive means securing said label means to said toy figure and said decorative means depicting a physical feature associated with said toy figure, said flexible material being stretched and contoured onto said compoundly curved surface with a minimum of wrinkling of said label means.

2. The combination described in claim 1 wherein: said decorative means depicts the eyes and a portion of the hair region of said toy figure.

3. The combination described in claim 1 wherein: said adhesive means is of a material that remains resilient after application, to permit flexing with said label means after application to said toy figure.

4. The combination described in claim 1 wherein: said decorative means depicts doll clothes.

5. The combination described in claim 4 wherein: said label means comprises a plurality of labels; a first of said labels defines the front part of a predetermined clothes piece that normally encompasses the body, and a second of said labels defines the rear part of said clothes piece, said first and second labels constructed so that together they can encompass a three-dimensional toy figure body portion of predetermined size.

6. The combination described in claim 1 wherein said figure toy represents an insect and said decorative means depicts the markings found on the body of said insect.

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