[54] DOLL WITH PERMANENTLY SECURED HAIR COMBINED WITH DETACHABLE HAIR INSERTS
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[73]
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[22] Filed: Dec. 29, 1971
[21] Appl. No.: 213,420
[52] U.S. Cl. ................................ 46/172, 46/135 R
[51] Int. Cl.............................................. A63h 3/44
[58] Field of Search. $\qquad$ 46/172, 22, 135 R; 132/5, 53, 54, 56
References Cited UNITED STATES PATENTS

| $2,078,809$ | $4 / 1937$ | Richman .........................46/135 R X |
| ---: | ---: | :--- |
| $3,003,155$ | $10 / 1961$ | Mielzynski et al............ 46/172 X |
| $1,627,511$ | $5 / 1927$ | Hopf........................... 46/172 X |


| $2,059,043$ | $10 / 1936$ | Schwerner ........................... 46/172 |
| ---: | ---: | :--- |
| $2,602,460$ | $7 / 1952$ | Hull ........................... 46/172 UX |
| $3,495,603$ | $2 / 1970$ | Young ........................... 132/53 |
| $3,433,235$ | $3 / 1969$ | Doolittle ........................... 132/53 |

FOREIGN PATENTS OR APPLICATIONS

| 798,053 | $3 / 1936$ | France ................................. 132/56 |
| ---: | ---: | :--- |
| $1,063,021$ | $12 / 1953$ | France .......................... 46/172 |
| $1,912,715$ | $10 / 1970$ | Germany ......................... 132/53 |

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## [57]

## ABSTRACT

A doll head construction having strands of hair with a plurality of yieldable apertures in the top of the doll head and a plurality of different supplemental hair pieces for insertion in the head apertures for combining with the existing hair strands creating different hair arrangements for the doll.

2 Claims, 11 Drawing Figures


## SHEET 1 OF 2



$F_{2} 4$

$\mathrm{F}_{3} 5$


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## DOLL WITH PERMANENTLY SECURED HAIR COMBINED WITH DETACHABLE HAIR INSERTS

## BACKGROUND OF THE INVENTION

## 1. Field of the Invention

This invention relates to dolls, and more particularly, to a novel doll head and supplemental hair piece component construction.

## 2. Brief Description of the Prior Art

Pertinent prior art known to the applicant comprises the following U.S. Pats.:
Schaetzke, No. 1,319,800;
Cannon, No. 1,329,509;
Schwerner, No. 2,059,043;
Palmer, No. 2,152,085;
Mann, No. 2,253,635; and;
Sharff et al., No. 3,210,884.
Generally speaking, the art shows doll heads or the like, wherein different hair pieces may be provided for the doll. However, the means for accomplishing the provision of the different hair pieces limits the individual creativity of the participant. For example, in some of the prior art structures, this is accomplished by merely replacing the entire skull cap portion of the doll and in other prior art structures, this is accomplished by merely allowing for the replacement of a small portion of the hair piece of the doll.

## SUMMARY OF THE INVENTION

This invention is directed, in brief, to the provision of a novel doll head and a supplemental hair piece construction.
The best mode currently contemplated for carrying out the invention, includes the provision of a doll head with simulated human features including ears, eyes, nose, and the like, and a skull portion with permanent hair strands and a plurality of yieldable openings therein. A multiplicity of different supplemental hair insert pieces are provided, each having a rigid end portion for insertion into said yieldable apertures of said skull portion for combining with the existing or permanent hair strands and creating different hair arrangements.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagrammatic view, illustrating one form of the combination doll head and supplemental hair piece arrangement of this invention;
FIG. 2 is a diagrammatic view illustrating another form of the combination doll head and supplemental hair piece arrangement of this invention;
FIG. 3 is a side elevational view of the doll head of this invention;
FIG. 4 is a fragmentary enlarged perspective view showing the structure of the yieldable apertures of the doll head of this invention;
FIG. 5 is a section view showing the hair insert piece inserted into the doll head aperture;
FIG. 6 is a composite view illustrating other forms of hair insert pieces for this invention;
FIG. 7 is a diagrammatic view similar to FIG. 3 illustrating a modified form of this invention;
FIG. 8 is a fragmentary enlarged perspective view showing the structure of the yieldable apertures of the doll head shown in FIG. 7;

FIG. 9 is a view showing the end of the modified hair insert piece being inserted into one of the head apertures;
FIG. 10 is a section view showing the modified hair
5 insert piece inserted into the doll head apertures; and
FIG. 11 is a fragmentary section view showing the securement of the simulated hair to the hair plug.

While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail different embodiments therefor, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiments illustrated.

## BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENT

The doll head 10 of this invention includes simulated human features, such as a mouth 12 , nose 14 , eyes 16 , ears 18 and a scalp or skull portion 20. Preferably, the doll head is of a suitable rigid, but slightly yieldable material, such as a rigid vinyl.
The scalp or skull portion 20 includes a plurality of permanent or existing hair strands $2 \mathbb{1}$ and a plurality of yieldable hair piece receiving apertures or portions 22. The receiving portions 22 may take the form shown in FIGS. 4 and 5 , and generally comprise an aperture 24.
A plurality of generally designated supplemental hair insert pieces $\mathbf{3 0}$ are provided for combining with existSpecifically, as shown in FIG. 6, the supplemental hair insert pieces 30 may be in the form of a flip curl 31, a ringlet curl 32, a sausage curl 33, braid bows 34 , or, as shown in FIG. 1, in the form of braid cups 35. FIGS. 1 and 2, diagrammatically illustrate different hair styles 36 and 38, respectively, which could result from utilizing different hair insert pieces, with the doll head 10 , shown in FIG. 3. It is to be understood that the hair insert pieces shown in FIGS. 1 and 6 are only exemplary in nature, and that a wide variety of different configurations and styles could be provided.

Wholly, without regard to the specific style or configuration of the hair insert pieces, each insert piece is provided with a plug or insert end 40, preferably having a conical point 42 and a cylindrical body 44 with a hollow interior 45 (not shown). The underside of body 44 provides a limiting shoulder 46. A suitable securing means, such as a staple, adhesive, or the like, is utilized to hold the simulated hair in the hollow interior of the insert plug 40.

As shown in FIGS. 4 through 6, the hair insert pieces 30 may be connected to the scalp or skull portion 20 of the doll head 10 by thrusting the plug end 40 through the yieldable receiving portion 22, defined by the aperture 24. As best seen in FIG. 6, the extent of the insertion of the hair insert piece 30 is limited by the shoulder 46 and the plug portion 40 is snugly and securely held in place by the peripheral embracement afforded by the sides of aperture 24. Preferably, apertures 24 are slightly undersize relative to the enlarged portions of tapered or conical points 42 so that, as the points 42 are inserted therethrough the side walls of the aperture 24 will engage the point 42, and yield slightly in firm frictional engagement therewith, but permitting withdrawal of the hair piece if desired.

The modified arrangement shown in FIGS. 7 through 11 utilizes a doll head very similar to that shown in FIG

1 and identical reference numerals are applied to related components. The modified arrangement generally differs in the specific form of the hair piece receiving apertures or portions 122.

The hair piece receiving apertures 122 are comprised of intersecting and diverging slits $124 a$ and $124 b$ and $124 c$ which define, together with the remainder of the scalp or skull portion 20, yieldable flap portions 128a, $128 b$, and $128 c$ of generally triangular configuration. The supplemental hair insert pieces 130 include a hair plug 140, a needle-like tapered point 142 and a cylindrical body 144 having an outwardly facing recess 146. Plug 140 may be secured to body 144 , in the manner shown in FIG. 11. As shown, a strand 147 is tied around the plug 140 and extends through an opening $147 a$ in the recess 146. A suitable adhesive 148 may be applied to the interior of recess 146 , following which the plug may be brought into engagement therewith by drawing on the strand $147 a$ to adhere the plug 140 relative to the body 144.

When the insert piece 130 is pushed through the intersections $124 a, 124 b$ and $124 c$, the flap portions will yield to permit penetration of the point 142 to the interior of the scalp portion 20. The flaps 124a, 124b and $124 c$ will snugly embrace the point 142 and securely retain the insert piece against accidental or unintended withdrawal. The underside $\mathbf{1 5 0}$ of the body 144 defines a shoulder which limits the insertion of the insert piece through the aperture 122.
Thus, it can be seen that with the doll head construction of this invention, an unlimited number of hair styles may be created by the participant. The doll head is intended to be provided with a large number of yieldable receiving openings 22 and it is contemplated that the head 10 could be sold as a basic set, with different
supplemental hair insert pieces, such as $\mathbf{3 0}$ through 35 so that a child could spend endless hours creating different hair styles to alter the appearance or simulated personality of the doll.
The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, as some modifications may be obvious to those skilled in the art.
I claim:

1. In combination, a doll head and hair piece construction, comprising:
a doll head including a skull portion having strands of hair permanently secured thereto and a plurality of hair piece receiving apertures therein defining yieldable receiving portions of said skull portion distributed amongst said permanently secured hair strands,
and a plurality of supplemental hair insert pieces, each including a tuft of simulated hair and a means for cooperation with said yieldable receiving portions to releasably retain the associated piece in one of said receiving apertures, said means including an insertion plug to which said tuft of simulated hair is connected, said insertion plug being capable of captivation in said receiving apertures in said skull whereby the tufts of simulated hair on said insertion plugs may be intermeshed with the permanently secured hair strands on the skull portion of the doll head, for hair styling purposes.
2. The combination of claim 1 wherein certain of said hair tufts have different styling configurations to facilitate providing different hair styling arrangements for the doll head.
