Jan. 5, 1943. M. MAISEL 2,307,523

DOLL HEAD

Filed March 19, 1941

Fig. 1.

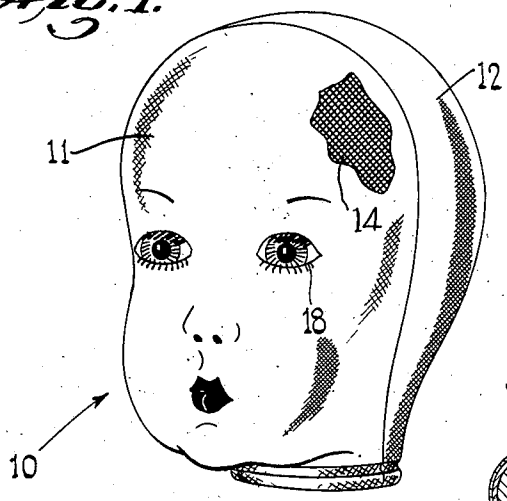


Fig. 3.

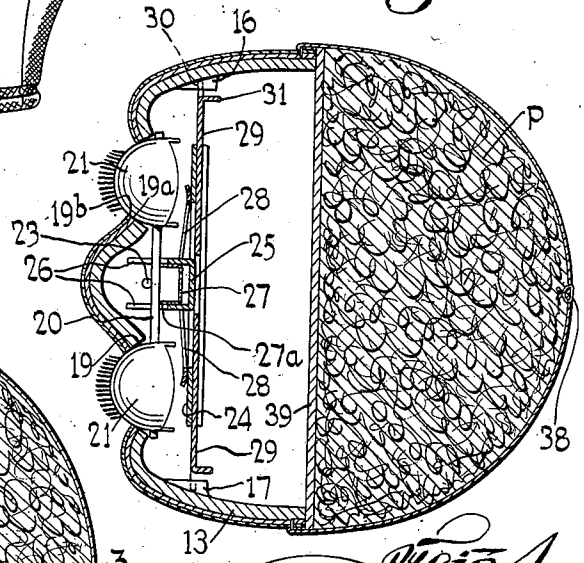


Fig. 2.

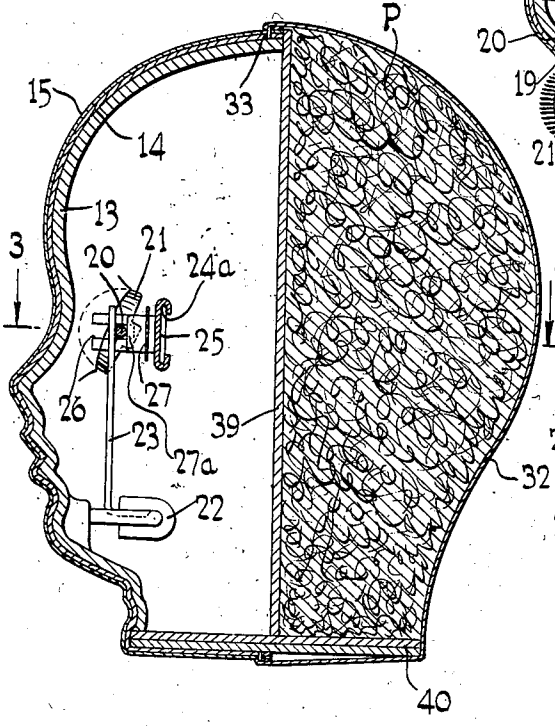
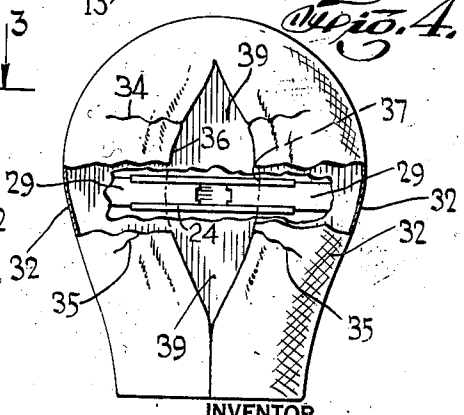


Fig. 4.



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Patented Jan. 5, 1943 2,307,523

UNITED STATES PATENT OFFICE

2,307,523

DOLL'S HEAD

Michael Maisel, New York, N. Y.

Application March 19, 1941, Serial No. 384,044

2 Claims. (Cl. 46—164)

This invention relates to dolls' heads.

The invention is particularly directed to a doll's head for use in the so-called cloth or rag dolls, and the principal object of the invention is to provide a doll's head of the character described wherein the face portion as a whole, although made in the form of a mask of sheet material, such as textile, is nevertheless rigid and inflexible, so that the usual movable eye set may be mounted in the head and the eyes function and be maintained in position in substantially the same manner as in the usual dolls' heads made of molded composition material.

Another object of my invention is to provide a doll's head having movable eyes and a face of textile or the like sheet material, which is accurately and permanently contoured in close simulation of the human features.

A further object of my invention is to provide a doll's head having movable eyes wherein the portions of the head outlining the distinctive facial features are rigid, and wherein the remaining portions of the head not bearing distinctive features are soft.

Still another object of my invention is to provide a doll's head having movable eyes and a face comprising textile fabric backed by a rigid support contoured to the desired shape of the face, the balance of the head being soft and stuffed.

An additional object of my invention is to provide a doll's head of the character described which shall comprise relatively few and simple parts, which shall be inexpensive to manufacture and easy to assemble, and which shall be rugged in construction.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the claims.

In the accompanying drawing, in which is shown one of the various possible embodiments of this invention,

Fig. 1 is a perspective view of a doll's head embodying my invention, with a small portion of the textile fabric overlying the temple broken away to show the underlying structure;

Fig. 2 is a vertical sectional view of said head;

Fig. 3 is a sectional view taken substantially along the line 3—3 of Fig 2; and

Fig. 4 is a rear view of the head with the stuffing removed and the cardboard partition partially broken away to show the supporting mechanism for the movable eyes.

Referring now to the drawing, I have shown a doll's head 10 comprising in general a front portion 11 which includes the doll's face, forehead and front portion of the neck, and a rear portion 12 which includes the back of the head and back of the neck.

In accordance with my invention, I have so constructed the portions 11 and 12 that the front portion 11 is rigid and firm and the rear portion 12 is soft and yielding. To this end the front portion 11 comprises a molded front half section 13 of some suitable composition, such as for example pressed cork, pressed paper, pressed pulp board, clay, china, synthetic resin or the like. The front surface of this section 13 has a contour which closely simulates a human face. Overlying and suitably attached to the said front surface of the section 13 is a backing layer 14 of buckram and a flesh-colored surface layer or mask 15 of a textile material having a relatively fine weave. These layers 14 and 15 may be secured to the half section 13 in accordance with any method known to the art. In one such process the layers 15 and 14 may be laid on one of the molds in which the section 13 is to be formed, the layer 14 having been impregnated with a suitable adhesive. The material of which the section is to be formed is then introduced into the mold and heat and pressure applied, thus simultaneously securing the layers 14 and 15 to the section and imparting the proper configuration to the front surface of the section.

The front portion 11 is suitably painted to simulate the human complexion.

The textile surface of the face fabricated as above described is firm but soft to the touch and lacks the sheen usual in molded or composition heads. Also the face feels warmer than a composition face because of the latter's relatively high coefficient of heat conductivity.

The inner surface of the head is provided with raised reinforcing portions 16 and 17 whose purpose will soon be described. Cooperating with the movable eyes 18 are a pair of eye sockets 19 which are cut or molded in the half-section 13. Registering eye apertures 19*a* and 19*b* are also provided in the fabric layers 14 and 15.

Any suitable movable eye mechanism of a type known to the art may be mounted within the head. Such mechanism may comprise a standard eye set consisting of an eye axle 20 on both ends of which there are mounted for rotation

therewith a pair of hemispherical eyeball shells 21, said eyeball shells being in registration with and partially projecting through the eye sockets 19 and apertures 19a and 19b. A weight 22 attached to the axle 20 by means of a pendulum rod 23 imparts the necessary rotary movement to the eyes 13 upon change in angular position of the head. To support the axle for rotation relative to the head there is provided a bridge plate 24 having a U-shaped portion 25, each leg of which is slotted as at 26 to slidably and rotatably receive the eye set axle 20. A spring member 27 having a U-shaped portion 27a received within the U-portion 25 of the bridge plate bears against the eye set axle 20, resiliently urging same forwardly against the sockets 19 under the influence of a pair of integral legs 28 extending rearwardly and outwardly from the U-portion 27a and resting under pressure against the bridge plate 24. Extension members 29 slidingly received between the bridge channels 24a have tines 30 provided on their free ends and rearwardly projecting lugs 31 adjacent said tines.

To mount the eye mechanism in the doll's head the eye set and bridge may first be assembled and then introduced into the head with the eyeball shells 21 disposed in the sockets 19. The bridge plate 24 is lined up between the two raised platforms 16 and 17 whereupon the sliding extensions 29 are moved outwardly from the bridge by a suitable installation mechanism operating on the lugs 31 to deeply imbed the tines 30 in the said platforms.

It will thus be seen that I have provided a front face portion 11 which although it has a soft and novel textile-surfaced face may still be fabricated with the use of many of the mechanisms and apparatus presently employed in connection with the manufacture of composition heads and that said face is supported by a hollow rigid molded section having movable eyes rotatably mounted therein and extending through eye socket apertures in said molded section and said textile face.

The outer surface of the back of the head is formed from a textile material 32 which may be substantially similar in texture and color to the material 15 employed to surface the front face portion 11. Said layer of material 32 is attached at its forward edge by a line of stitching 33 to the rear edge of the fabrics 14 and 15. For this purpose I may, previous to the aforesaid stitching operation, raise the rear of the buckram and textile layers 14 and 15 slightly away from the half-section 13 to free the same for sewing to the rear fabric 32. The said rear fabric is suitably shaped as by goring at a plurality of portions 34 and 35 so that when the fabric is fully extended it will assume a contour simulating the rear of a human head. A portion of the fabric edges 36 and 37 are left open to allow the rear portion 12 of the head to be stuffed with a suitable material P, such as for example loose cotton, wool, or kapok. After the head has been filled with sufficient material to fully distend the fabric 32, the edges 36 and 37 are sewed together by a line of stitching 38.

In order to prevent the material filling the rear portion 12 from entering into the hollow front section 13 and interfering with the free movement of the eyes, I provide an intermediate partition 39 made of a relatively rigid layer of material, such as for example cardboard or a synthetic resin, which is glued to the rear edges of the section 13 and substantially conforms to the profile thereof. Said partition is inserted in position after the eye set has been assembled within the head but before the packing material P has been introduced. If desired to assure sufficient room for free operation of the weight 22, the partition may be made of concave shape, such as ellipsoidal.

To close off the bottom of the head and to also serve, if desired, as a means for attaching the head to a doll, I provide a pair of circular discs 40 which are abutted against the bottom edges of the section 13 and partition 39, the discs being held in position by underlying fabric layers comprising extensions of the front fabrics 14 and 15 and the rear fabric 32. The said discs 40 will also be held in position after completion of the head by pressure of the packing material P.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. For use in a doll's head a molded hollow unfilled front section whose external contour closely simulates human features, a layer of buckram overlying and closely following the external contour of said molded front section, and a layer of a closely woven soft textile fabric overlying said buckram layer and closely following the external contour of said molded front section.

2. For use in a doll's head a molded hollow unfilled front section whose external contour closely simulates human features, a layer of buckram overlying and closely following the external contour of said molded front section, a layer of a closely woven soft textile fabric overlying said buckram layer and closely following the external contour of said molded front section, said molded front section having eye sockets, said layers of buckram and closely woven textile fabric having eye apertures in alignment with said eye sockets, an eye set cooperating with said eye sockets and said eye apertures, said eye set including a gravity actuated swinging member for causing said eye set to rotate when said head is tilted, and means for mounting said eye set on said molded front section for rotation relative thereto.

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