Jan. 31, 1961 H. WEINER 2,969,610

TOY WITH CHANGEABLE FACIAL FEATURES

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FIG. 1

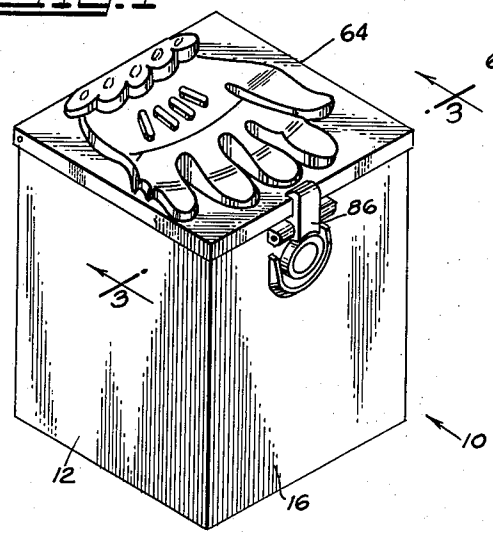


FIG. 2

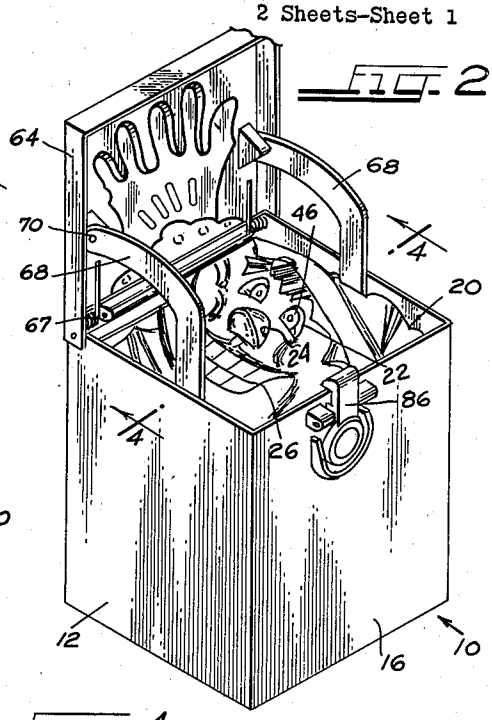


FIG. 3

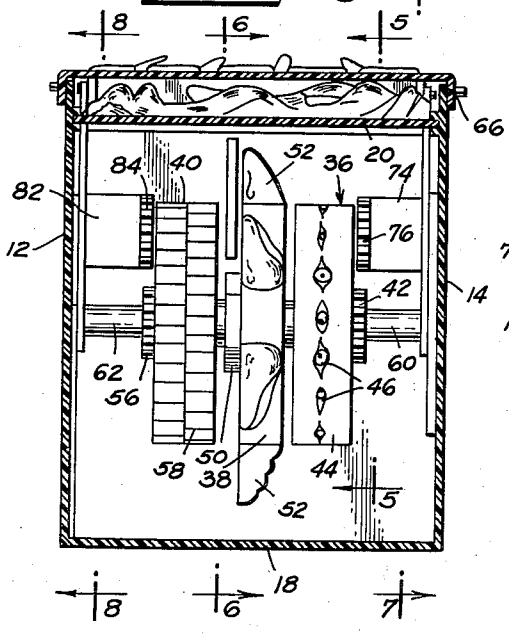
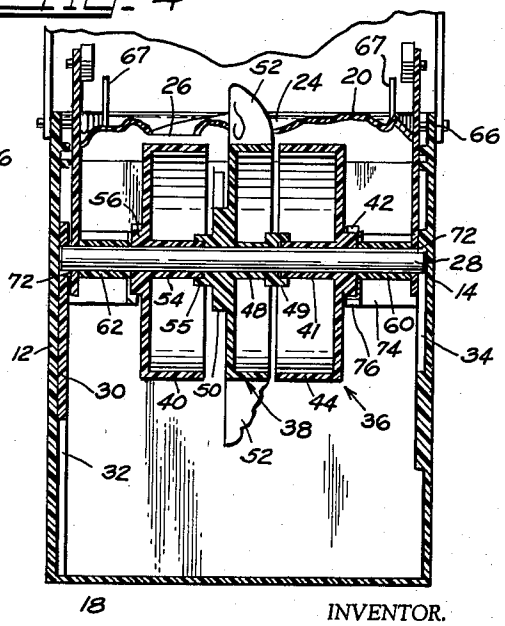


FIG. 4



INVENTOR.
HILMAN WEINER
BY Mary R. Kraus
ATTY.

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FIG. 5

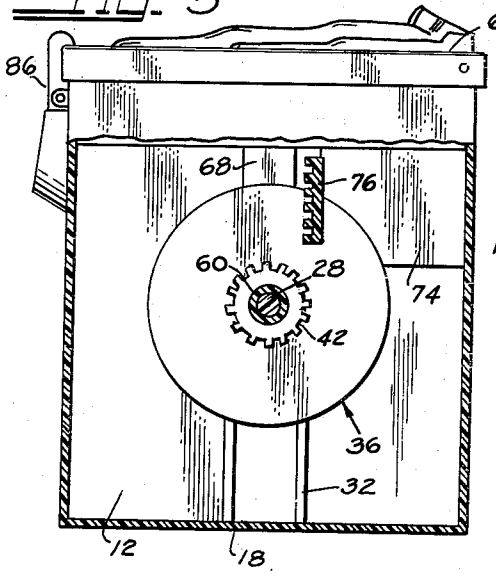


FIG. 6

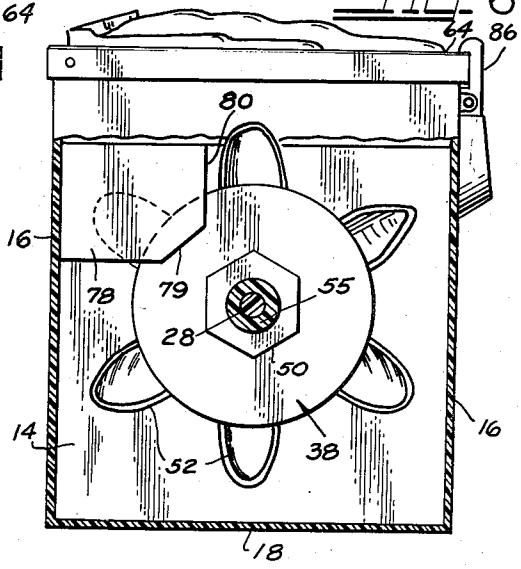


FIG. 7

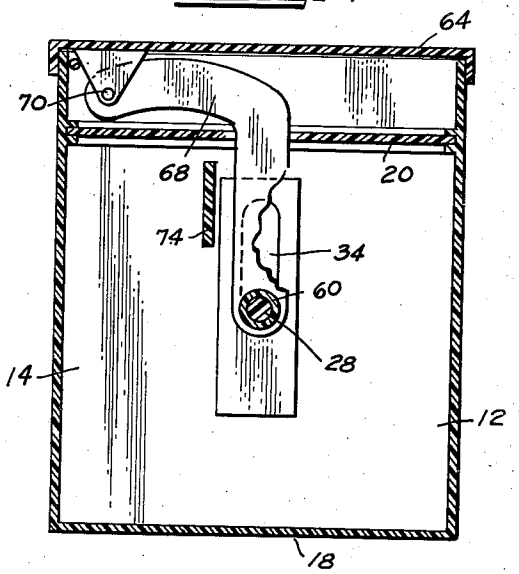
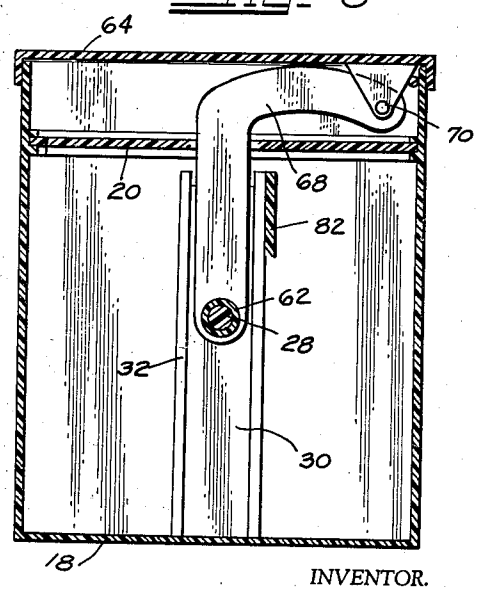


FIG. 8



INVENTOR.
HILMAN WEINER
BY Mary R. Franco

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TOY WITH CHANGEABLE FACIAL FEATURES

Hilman Weiner, 5541 W. Quincy St., Chicago, Ill.

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3 Claims. (Cl. 46—135)

This invention relates to a toy with changeable facial features.

One of the objects of this invention is to provide a toy in which certain of the features of the face, for example, the eyes, the nose and the mouth change with each manipulation of the toy. Also, to provide a toy of the foregoing having a three dimensional face.

Another object of this invention is to provide a toy in which certain features of the face are automatically changed with each operation of the toy.

More specifically, there is provided a toy comprising a container within which there is a simulated face which is enclosed by a cover. The simulated face has eyes, nose and mouth openings through which different eyes, noses and teeth are presented each time the cover is opened, for the purpose of presenting a different facial expression with each opening of the cover.

Other objects will become apparent as this description progresses.

In the drawings:

Figure 1 is a perspective view of the toy in closed position;

Figure 2 is a view of same with the cover in open position;

Figure 3 is a view partly in section taken on line 3—3 of Figure 1;

Figure 4 is a sectional view taken on line 4—4 of Figure 2;

Figure 5 is a view taken on line 5—5 of Figure 3;

Figure 6 is a view taken on line 6—6 of Figure 3;

Figure 7 is a view taken on line 7—7 of Figure 3; and

Figure 8 is a view taken on line 8—8 of Figure 3.

Referring to the drawings, the housing generally indicated at 10 has a bottom 12, top 14, sides 16 and back 18. The front of the housing is closed by a plate which is molded to form a simulated face 20. The plate forming the face 20 is set inwardly of the front of the housing. The simulated face 20 is provided with a pair of eye openings 22, nose opening 24 and a mouth opening 26.

Slideably supported within the housing 10 is a post 28 which supports three horizontally positioned rotatable elements which carry the simulated eyes, noses and teeth, to be described. The post 28 is secured at the bottom thereof to a rectangular shaped strip 30 which is slideable within a slotted recess 32 formed in the bottom wall 12 of the housing. The top of post 28 is slideably secured in an elongated slot 34 formed in the top wall 14 of the housing. Thus, as the post is slid, the bottom slideable member 30 slides with the post 28 and the top of the post 28 is supported by and slides within the slot 34.

Rotatably supported on post 28 are three rotatable members generally indicated by the numerals 36, 38 and 40, each of which is generally of wheel shape and each has an annular peripheral surface on which the particular facial elements are imposed. Rotatable member 36 has a central hub portion 41 engaging the post 28.

A gear 42 is formed as part of rotatable member 36

and same extends above the top plane of said member. The annular peripheral surface 44 of said member has painted or otherwise formed thereon a series of spaced simulated eyes 46. In the present embodiment fifteen eyes are spacedly formed in the surface 44. Gear 42 has fifteen teeth, thus, two eyes will always be in alinement with eye openings 22.

Positioned below rotatable member 36 is rotatable member 38 having a central hub 48 which has an enlarged upper recess 49 to receive the lower end of hub 41. Rotatable member 38 is provided with a hexagonal shaped member 50 (Figure 6). The annular peripheral wall of member 38 is provided with a plurality of spaced noses, six in number, generally indicated at 52 which are formed in relief.

The rotatable member 40 has a central hub 54 engaging the post 28. The upper end of hub 54 is confined within the annular wall 55 formed in rotatable member 38. Rotatable member 40 has a gear 56 formed thereon. The annular peripheral wall of member 40 has painted or otherwise impressed thereon a continuous band or series of simulated teeth 58. Upper and lower spacing sleeves 60 and 62 are positioned on the post 28.

The post 28 and the rotatable members 36, 38 and 40 are all slideable as a unit with the opening and closing of the hinged cover now to be described.

A cover 64 is hingedly secured as at 66 to the housing 10 adjacent the simulated face plate 20. Spring means 67 normally tend to urge the cover 64 to open position, as shown in Figure 2. Upper and lower connecting members 68 generally L-shaped connect the cover 64 to the post 28. One end of each of the connecting members 68 is pivotally connected to the cover as at 70, while the opposite ends of each of said connecting members are provided with an opening 72 which engages the post 28.

Opening of the cover 64, as shown in Figure 2, will slide and move the post 28 and rotatable members thereon to the position shown in Figure 4 in which the rotatable members are immediately adjacent the simulated face plate 20 so that one pair of simulated eyes 46 are alined with eye openings 22, one of the noses 52 projects through nose opening 24 and a series of simulated teeth 58 are alined with mouth opening 26.

In order to present different eyes, noses and teeth with each opening and closing of the cover 64, the rotatable members 36, 38 and 40 are rotated with each such opening and closing of the cover. As best seen in Figures 3 and 5, there is provided a stationary section 74 which depends from the top wall 14 of the housing. The section 74 has a rack of laterally facing teeth 76 which are engaged by the gear 42 on rotatable member 36 as the post 28 is moved forwardly with the opening of the cover 64.

As best seen in Figures 3 and 6, there extends from one of the side walls 16 of the housing a plate 78 which has an inclined lead edge 79 and a straight edge 80 parallel to the side wall 16. Irrespective of the position of the rotatable member 38, the hexagonal section 50 of said rotatable member will always be guided into the straight edge 80 so that one of the noses 38 is always in alinement with the nose opening 24 so that a portion of the nose extends forwardly of the nose opening 24.

Extending upwardly from the bottom 12 is a stationary section 82 which has a rack of laterally facing teeth 84 which are engaged by the gear 56 on rotatable member 40.

When the cover 64 is in closed position, as shown in Figure 1, the cover is held closed by a snap lock 86. When thus closed, the post 28 and rotatable members thereon are positioned as shown in Figure 3, that is, in their most rearward position. In such position the gears 42 and 56 of the rotatable members 36 and 40 are not

in engagement with rack teeth 76 and 84 respectively. Likewise, hexagonal section 50 is clear of the edges of plate 78. Therefore, when the cover 64 is closed, the rotatable members 36, 38 and 40 will be free to rotate freely for a short period of time, this rotation being caused by the rearward sliding movement of the shaft 28 and rotatable members thereon. When the lock 86 is released, the spring 67 will cause the cover 64 to hinge open, as in Figure 2, simultaneously moving the post 28 and rotatable members thereon forwardly, as shown in Figure 4. As same moves forwardly, gear 42 on member 36 will engage rack teeth 76 to rotate member 36 so that two eyes 46 are presented through eye openings 22. Simultaneously, gear 56 on member 40 will engage rack teeth 84 to rotate member 40 to present a series of teeth through mouth opening 26. Simultaneously, the hexagonal section 50 on rotatable member 38 will be moved into engagement with edges 79 and 80 so that one of the noses is alined with nose opening 24. Every time the cover 64 is opened different eyes, noses and teeth appear so that different facial expressions are presented. By this arrangement an unlimited number of combinations are possible, thus providing entertainment for the child.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

I claim:

1. A toy comprising a housing having a simulated face, said face having eye openings and a nose opening, a slideable post supported in said housing, a pair of rotatable members supported on said slidable post and rotatable on said post, one of said rotatable members having simulated eyes and the other of said rotatable members having simulated noses, a cover for said face, a connecting member between said cover and said post adapted to slide said post forwardly when said cover is moved to open position, means for rotating and alining said rotatable members with their respective face openings when said post is slid forwardly so that said eyes and nose are visible through the openings in said simulated face.

2. A toy comprising a housing having a simulated face, said face having a plurality of eye openings, a nose opening and a mouth opening, a post slidably supported in said housing, three rotatable members supported on said post, the first of said members having simulated eyes, the second having simulated noses and the third having simulated teeth, a cover for said face, means within said housing and engaged by said rotatable members for rotating and alining said members when the post is slid forwardly, connecting means between said cover and said post adapted to slide said post forwardly upon moving the cover to uncover said face.

3. In a structure defined in claim 1 in which the noses are formed in relief and are adapted to extend partially through said nose opening when alined therewith.

References Cited in the file of this patent

UNITED STATES PATENTS

136,313	Evert et al.	Feb. 25, 1873
961,262	Slough	June 14, 1910
2,669,802	Olivier	Feb. 23, 1954