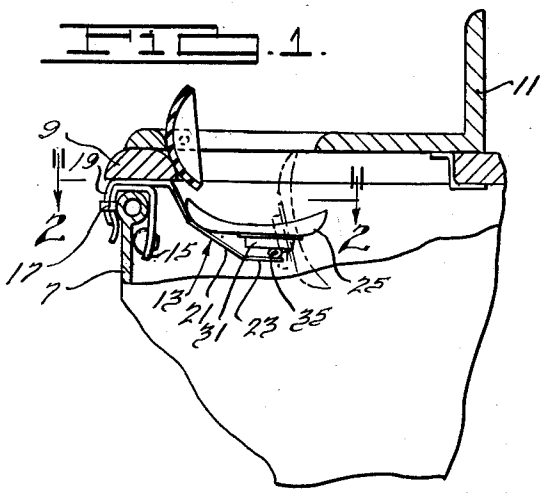
Jan. 11, 1955 W. J. MACKEY 2,699,139

MUSICAL TOILET TRAINER FOR INFANTS

Filed Sept. 29, 1953

FIG. 1.



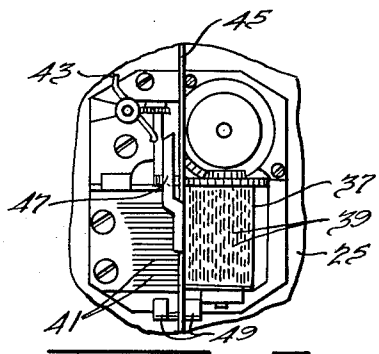


FIG. 5.

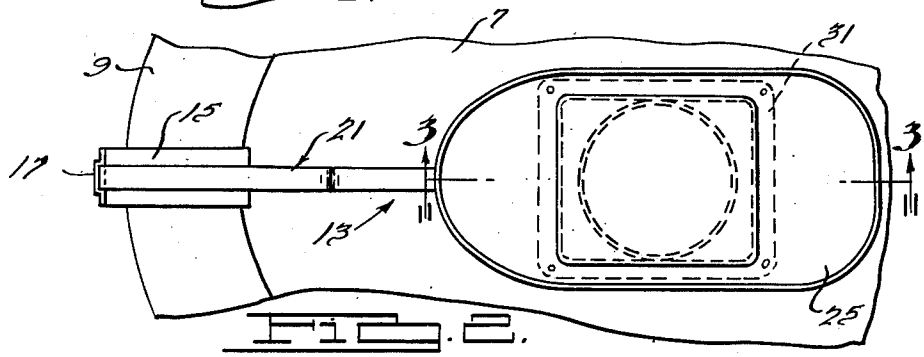


FIG. 2.

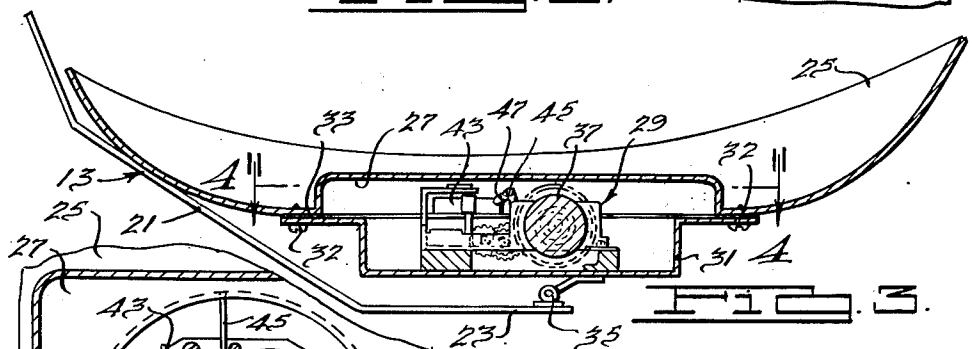


FIG. 3.

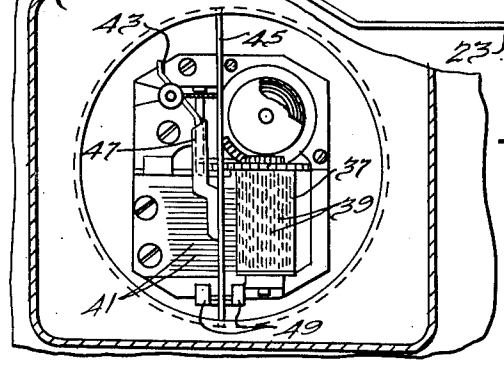


FIG. 4.

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MUSICAL TOILET TRAINER FOR INFANTS

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Application September 29, 1953, Serial No. 383,056

3 Claims. (Cl. 116—67)

This invention relates generaly to a toilet training device for infants and more particularly to a device which will play a musical tune upon the occurrence of a toilet function by the infant.

It is an object of this invention to provide a toilet training device of the aforementioned type which may be easily attached to a conventional toilet bowl and easily removed therefrom for cleaning purposes.

It is a further object of this invention to provide a toilet training device of the aforementioned type incorporating a music box connected with a receptacle which will tilt upon receiving an infant's excrement so that the music box will automatically play only upon tilting of the receptacle.

It is a still further object of this invention to provide a device of the aforementioned type, in which the music box mechanism is sealingly enclosed so that the device can be washed or cleaned without damaging the mechanism.

It is a still further object of this invention to provide a novel automatically actuated switch mechanism for controlling the operativeness of the music box mechanism.

It is a still further object of this invention to provide a device of the aforementioned type which is positive in operation, attractive in appearance, and relatively inexpensive to manufacture.

These and other objects of this invention become apparent from the following detailed description, taken in conjunction with the accompanying drawing, in which:

Figure 1 is a side view, partially in section and partially in elevation, of the device of this invention mounted on a conventional toilet bowl below an infant's toilet seat;

Fig. 2 is a fragmentary top plan view of the structure illustrated in Figure 1, taken along the line 2—2 thereof;

Fig. 3 is an enlarged sectional view of the structure illustrated in Fig. 2, taken along the line 3—3 thereof;

Fig. 4 is a view, partially in section and partially in elevation, of the structure illustrated in Fig. 3, taken along the line 4—4 thereof and illustrating the music box and its control switch in an operative position; and

Fig. 5 is a fragmentary view similar to Fig. 4, illustrating the music box mechanism in its inoperative position.

Referring now to the drawing, it will be seen that a conventional toilet bowl 7 is illustrated, having a toilet seat 9 hingedly supported thereon in the usual manner. An infant's toilet seat 11 is supported on the conventional toilet seat 9 and the device of this invention is indicated generally at 13 and disposed below the toilet seat. The device 13 includes a generally inverted U-shaped bracket member 15, which fits over and rests upon the top of the toilet bowl 7, adjacent the front thereof. The outer leg of the bracket member 15 is provided with a strap member 17, in which a vertical leg portion 19 of a supporting structure 21 is removably inserted and supported. The supporting structure 21 is in the form of a relatively rigid metal strap which extends inwardly over the toilet bowl rim and downwardly from the bracket member 15 and has a substantially horizontal inner end portion 23 on which a receptacle 25 is pivotally supported. The supporting structure 21 is thus removably connected to bracket 15 and supported on the toilet bowl. The receptacle 25 is of a generally elongated shallow panlike shape and the outer end thereof is adapted to engage a sloping intermediate portion of the supporting structure 21. The pan is pivotally supported, intermediate its ends, so that it is in a position to receive an infant's excrement and in its normal position slopes somewhat downwardly and inwardly so that any excrement will move toward the inner end of the pan to cause the same to tilt about its pivotal connection.

The under side of the pan, intermediate the sides and ends thereof, is dished upwardly to provide a recess 27. A noise-making mechanism such as a music box mechanism, generally indicated at 29, is disposed in the recess and sealingly enclosed by means of a housing structure 31, which is illustrated as being of an inverted hat shape in cross section. The music box mechanism 29 is rigidly connected with the housing 31 and the housing 31 in turn is rigidly connected with the under side of receptacle 25 by any suitable means, such as screws 32. A suitable seal 33 is disposed between the housing 31 and the under side of receptacle 25 so as to prevent water or other foreign matter from entering the housing and damaging the music box mechanism 29, even though the receptacle is washed or otherwise cleaned. The receptacle 25 is pivotally connected with the supporting structure 21 by means of pivotally interconnected elements 35 on the bottom of housing 31 and the inner end of the supporting structure 21.

The music box mechanism is of a generally conventional spring-wound, clockwork type, incorporating a spring-driven rotatable drumlike element 37, having a plurality of spaced picks or projections 39 thereon, which are adapted to engage and actuate spring fingers 41 of different lengths, supported in the housing, and which, when actuated by the picks 39, will cause a musical sound. The roller 37 operatively drives through a series of gears a bladed flywheellike member 43 which, when held against rotation, will, because of the gear ratio between it and the drum, prevent rotation of the drum and render the music box mechanism inoperative. A stop member 45 is pivotally supported in the music box housing 31 and has a suitable projection or the like 47, which is engageable with a blade of the flywheellike member 43, to prevent rotation of the same. When the music box and receptacle 25 are in a generally horizontal position, the stop member 45 will be in the position illustrated in Fig. 4, wherein it will prevent rotation of the member 43 and thus prevent operation of the music box mechanism. When, however, the receptacle 25 is tilted downwardly due to the application of weight to the inner end portion thereof, the stop member 45 will pivot, under its own weight, away from the flywheel member 43, as illustrated in Fig. 5, and release the same, so that the music box will become operative and will automatically play a musical tune. As soon as the receptacle 25 and the music box are returned to the horizontal position, the pivoted stop member 45 will automatically return to its normal position illustrated in Fig. 4, to engage the flywheel member 43 and prevent rotation thereof. Suitable postlike limit members 49 are provided for limiting the pivotal movement of the stop member 45, which for the purpose of illustration, is a rod extending across the top of the music box mechanism and having vertical leg members pivotally connected to the housing 31 for rotation about a horizontal axis.

It will thus be appreciated that this device may be easily removed from the toilet by merely removing the supporting structure 21 from the bracket member 15, and can be washed or scoured without danger of damaging the music box mechanism. Likewise, it will be appreciated that an infant's excrement will cause tilting of the receptacle 25 and music box, to cause the music box to automatically play and thus teach the infant the desired association between the music and toilet functions.

What is claimed is:

1. An infant toilet training device adapted to be mounted on a toilet and extend into the same, including rigid supporting structure adapted to be connected to the toilet, a receptacle piovtally connected with said supporting structure and adapted to tilt relative thereto upon the application of weight to a portion thereof, a noisemaking mechanism supported adjacent the under side of said receptacle, housing means sealingly enclosing said mechanism and connected with said receptacle, said noisemaking mechanism including a rotatably driven element, a stop

member pivotally supported in said housing means and normally engaging said mechanism and preventing rotation of said element when said receptacle is in its untilted position, said stop member being free from connection with any element outside of said housing means and supported so that it will automatically pivot out of engagement with said mechanism upon tilting of said receptacle to release said rotatable element.

2. An infant toilet training device adapted to be mounted on a toilet bowl and extend into the same, including a bracket member adapted to be connected to a toilet bowl, a rigid elongated supporting structure releasably connectible to said bracket member and adapted to extend into the toilet bowl, a receptacle pivotally mounted on said supporting structure adjacent the inner end thereof and adapted to tilt relative thereto upon the application of weight to a portion thereof, a signal device disposed adjacent the under side of said receptacle, means sealingly enclosing said signal device on the under side of said receptacle, means disposed within said enclosing means and normally rendering said signal device inoperative, said means being free from connection with any element disposed exteriorly of said enclosing means and automatically actuatable upon tilting of said receptacle to render said signal device operative.

3. An infant toilet training device adapted to be mounted on a toilet and extend into the same to receive the infant's excrement, including supporting structure connectible with the toilet and having a portion extending into the interior thereof, a receptacle pivotally connected with said supporting structure and adapted to tilt relative thereto upon the application of weight to a portion thereof, a music box connected with the under side of said receptacle and including a spring-loaded, clockworklike mechanism adapted to play a musical tune when operating, a stop member pivotally supported within said music box and normally engaging said mechanism to prevent operation of the same when the receptacle is disposed in its untilted position, said member being automatically tiltable out of engagement with said mechanism when said receptacle is tilted to permit said music box to operate.

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