Feb. 2, 1954 M. F. HARRIS 2,667,802

NURSERY SEAT WITH MUSIC BOX

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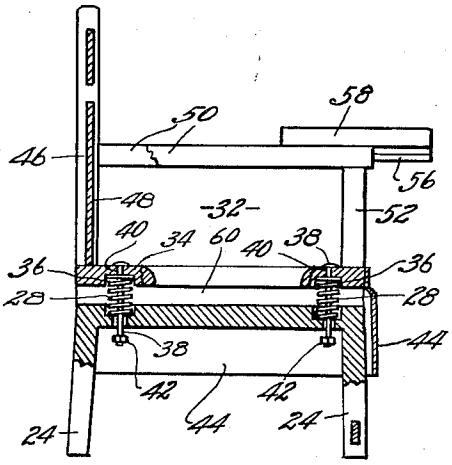


Fig. 2

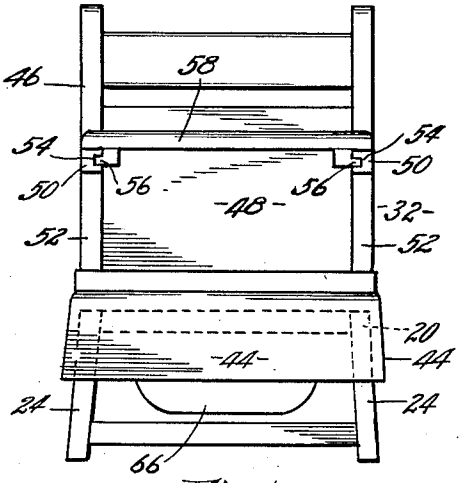
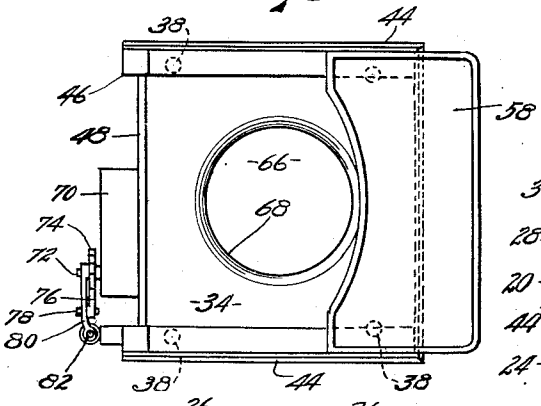


Fig. 1

Fig. 3



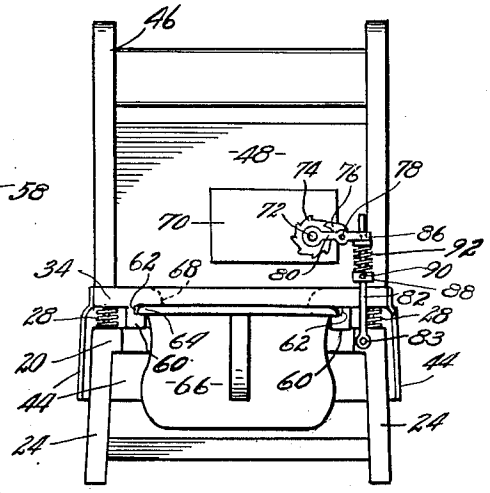


Fig. 4

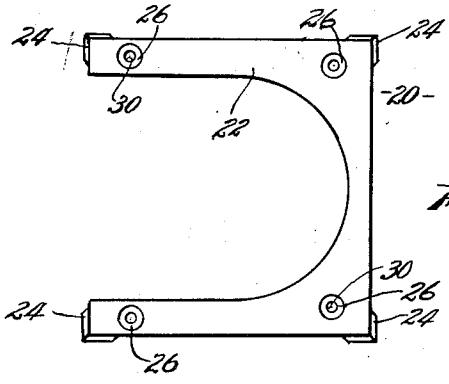


Fig. 5

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Fig. 7

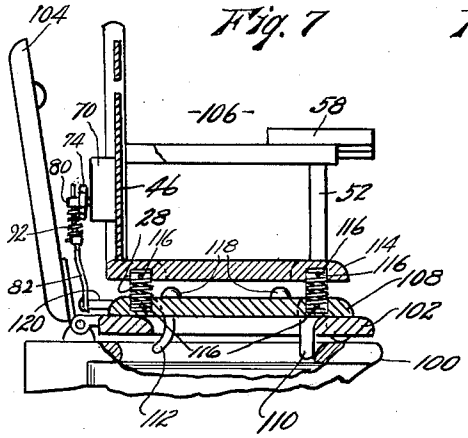
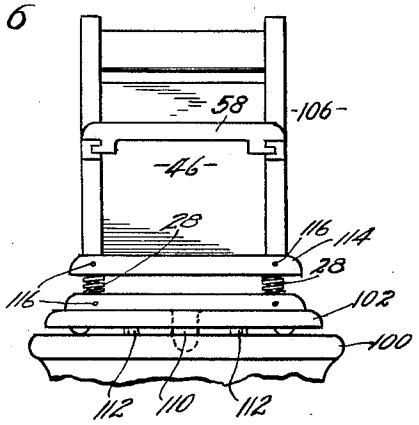


Fig. 6



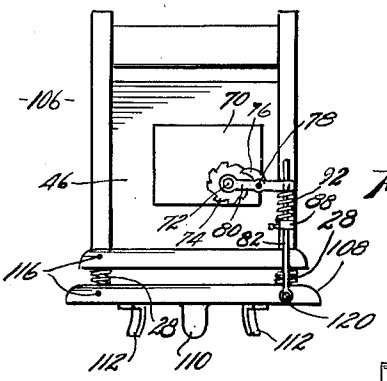


Fig. 8

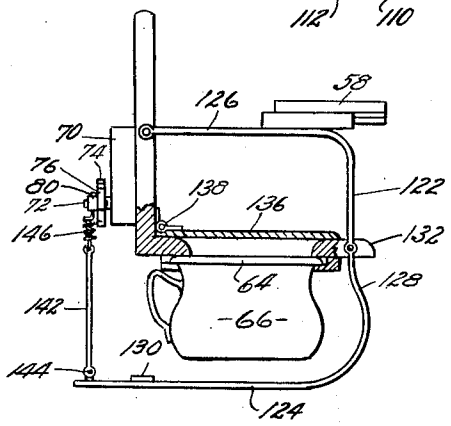


Fig. 10

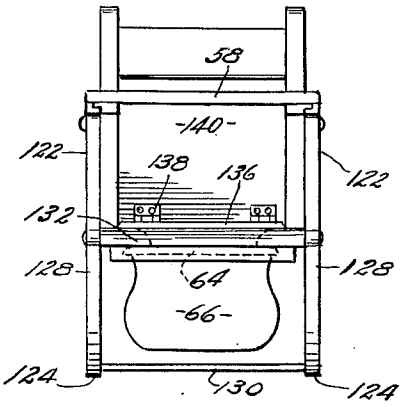


Fig. 9

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NURSERY SEAT WITH MUSIC BOX

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3 Claims. (Cl. 84—95)

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This invention relates to improvements in a nursery seat for a baby or a child's chair, and has particular reference to a nursery seat having resiliently spaced apart seat members, whereby the baby may, by bouncing in the seat, cause relative movement of said seat members toward and from each other.

Another object of this invention is the provision of a nursery chair having resiliently spaced apart rigid seat members, one of said seat members carrying a spring powered music box, and means interconnecting said music box with the other of said seat members whereby when said seat parts are moved toward and from each other said music box will be energized.

A further object of the present invention is the provision of a toilet chair having a spring mounted seat member fixed to a base member and movable relative thereto, and a skirt depending from said seat member to overlap the upper portion of base member.

Other objects of said invention are simplicity and economy of construction, ease and efficiency of operation, and adaptability for use with various types of nursery seats and child's chairs.

With these objects in view, as well as other objects which will appear during the course of the specification, reference will be had to the drawings wherein:

Figure 1 is a front elevational view of a baby's nursery seat embodying this invention.

Fig. 2 is a side elevational view of the nursery seat shown in Fig. 1, with some of the parts in section.

Fig. 3 is a plan view of the nursery seat.

Fig. 4 is a rear view of the nursery seat.

Fig. 5 is a plan view of the chair base frame.

Fig. 6 is a front view of a modified form of the nursery seat constructed to be fitted on the standard size toilet seats.

Fig. 7 is a side view of the nursery seat shown in Fig. 6.

Fig. 8 is a back view of the nursery seat detached from the toilet seat.

Fig. 9 is a front elevational view of further modified form of the nursery seat wherein the chair proper is made of spring strip metal.

Fig. 10 is a side elevation of the nursery seat shown in Fig. 9 with parts broken away.

Throughout the several views like reference characters refer to similar parts and the numeral 20 designates a chair base having a U-shaped top member 22 supported on corner legs 24. These legs are preferably flared outwardly to add stability to the chair. Recesses 26, formed

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downwardly into top member 22, serve to receive springs 28. Concentrically with recess 26 is a hole 30 which extends through top 22.

A floating seat member 32 having a toilet seat 34 resting on corner springs 28 positioned in recesses 26 and extending upwardly into recesses 36 formed in the underside of seat 34 is held against separation from top member 22 by bolts 38 which extend through springs 28 and seat member 22, hole 30 in top member 22, and hole 40 in seat 34. Bolts 38 are provided with nuts 42 and are long enough to permit a limited amount of movement between the chair base and the seat member. A skirt 44 is secured to the front and side edges of seat member 34 to extend about the upper portion of chair base 20 to prevent accidental pinching of the baby's hands between the relatively moving parts of the chair. It will be noted that skirt 44 is spaced apart from the body of the chair to permit free movement without rubbing the parts together.

The floating seat member has a back member 46 provided with a panel 48. Side arms 50 are secured at their rear ends to back member 46 and to the front vertical posts 52 which are supported on the front corners of seat 34. The inner edge portions of arms 50 are longitudinally grooved at 54 to receive a tongue 56 carried at the lower side of play table 58 for adjustment toward and from the child positioned on seat 34.

Seat 34 is provided at its lower side with two spaced apart parallel strips 60 which are notched to form grooves 62. The grooves 62 are open at the rear of the seat to receive the rim 64 of the chamber 66 whereby the chamber may be slid into position in register with the toilet seat hole 68. This rear positioning of the chamber to and from the toilet seat is quite important since it may be accomplished without disturbing the child located on the seat.

The principal feature of this invention resides in the spring powered music box 70 of the well known rotating drum type having suitable means whereby the graduated tines of a steel comb are plucked and vibrated to produce tunes. This music box is fixed to the back panel 48 and is provided with a spring winding stem 72 and adapted to be wound in but one direction. Rigidly attached to stem 72 is a ratchet wheel 74 adapted to be actuated by a pawl 76 which is pivoted at 78 to lever arm 80 which is pivotally carried by winding stem 72. An operating rod 82 pivoted at its lower end to a pin 83 carried by chair base 20 extends upwardly through an

opening 86 formed through the outer free end of lever 80. A set collar 88 mounted on rod 82 intermediate pin 84 and lever arm 80 is set by screw 90. Carried on rod 82 between collar 88 and lever arm 30 is a spring 92 which normally supports the lever arm 80 in its lower operating position. When the floating seat 34 is moved up and down relative to chair base 20 by the action of the baby in the seat or for any other reason, the lever arm 80 will be operated to move pawl 76 to rotate ratchet wheel 74 and turn the winding stem 72 to energize and cause the music box to play. Should the spring motor become completely wound then lever 80 can not be moved and as the operating rod 82 slides through opening 86 the spring 92 will be compressed without any damage to the energizing parts of the music box.

It is quite apparent that when the child is positioned on seat 34, it may cause the music box to play by simply bouncing up and down in his usual manner.

Figs. 6, 7 and 8 pertain to a modified form of the nursery seat adapted to be used in conjunction with a standard size toilet 100 having an apertured seat 102 provided with a hinged seat cover 104. The seat cover is hinged upwardly and rearwardly from the seat 102 to receive the nursery seat 106 thereon. This nursery seat comprises a base 108 having depending front-center detent 110 and rearwardly disposed hooked detents 112, which are adapted to be extended through the aperture of seat 102 whereby the nursery seat is secured in position on the toilet 100 against accidental removal. These detents are so constructed and positioned that the base 108 may be tilted rearwardly and downwardly to first position detents 112 through the seat aperture to engage seat 102 and then lowered at its front portion to position detent 110 in the apertured seat and against the front inner edge thereof.

The floating seat member 114 is substantially identical with that shown in the preferred form with the exception that in this modified form the pins 116 are substituted for bolts 38 and serve to secure the end portions of springs 28 in their respective recesses to hold the seat parts against accidental displacement. Base 108 is provided with upwardly projecting rubber bumpers 118 of sufficient height to prevent the toilet seat moving objectionably close to base 108 to pinch a child's fingers therebetween. A spring powered music box 70 having an operating rod 82 secured at its lower end to a trunnion 120 serves to cause an energizing of box 70 as the toilet seat and the base 108 are relatively moved toward and from each other. The music box and its method of driving are substantially identical with that shown in Figs. 1, 2, 3, and 4, with the exception that it can not be provided with a skirt 44 due to the fact that it is usable on a standard toilet seat, which varies in size and shape thus making it necessary to use suitable spacing bumpers 118 which serve to protect the child's hands from pinching between the relatively movable parts.

Reference will now be had to the nursery seat shown in Figs. 9 and 10 where the seat frame comprises a teeter chair made of U-shaped resilient steel frames 122, being positioned with their lower legs 124 disposed horizontally to serve as a base to rest on the floor. The upper legs 126 are spaced apart a sufficient distance to receive a toilet seat 132 therebetween with its front edge

secured to the vertical connecting portions 128 of the U-shaped members 122 intermediate legs 124 and 126. The lower legs 124 are secured in spaced apart relation by a spacing bar 130, so that the steel frames 122 are secured in relatively parallel relation so that when the legs 124 rest on the floor the toilet seat 132 may be moved relatively thereto by varying the weight on said seat.

The underside of seat 130 is provided with a pair of grooved runways 134 suitable for receiving the rim 64 of a chamber 66 for adjustment to and from the operative position below the toilet seat 132. The apertured seat member 132 is provided with a seat cover 136 hinged at 138 to cover the aperture of seat 132 to form a solid seat member.

The toilet seat is provided with a back panel 140 to which is secured a music box 70 of the character set forth in Fig. 4. This music box has a like driving mechanism including a lever arm 80 which is operated to energize the music box 70 by means of an operating rod 142 which connects the free end of lever arm 80 to the leg 124 by pivot 144. The connection of rod 142 to lever arm 80 includes a compressible spring 146 adapted to be of sufficient strength to normally cause the energizing of the music box and when said music box is fully energized the spring will compress sufficiently to allow relative movement of the parts without injury to the music box.

It is apparent that the species shown and described are generally similar and have many parts in common.

What I claim as new and desire to protect by Letters Patent is:

1. A nursery seat comprising a stationary base section, a floating seat member mounted on springs carried by said stationary member and movable relative thereto, a music box carried by said floating seat section and having a winding stem, and a resiliently extensible member interconnecting said winding stem with said stationary section, whereby as said floating seat member is moved relative to said stationary base said winding stem will be operated to energize said music box.

2. A nursery seat comprising a rigid base, a seat member disposed above said base, compression springs disposed between said base and seat whereby said seat is resiliently supported for movement relative to said base, a music box mechanism mounted on said seat member and including a spring motor having a winding stem transverse to the direction of relative movement of said seat and base, a ratchet wheel fixed on said stem, a lever pivoted at its inner end on said stem, a dog pivotally connected to said lever and engaging said ratchet wheel to turn said ratchet wheel as said lever pivots away from said base, and a resiliently compressible member interconnecting the outer end of said lever with said base.

3. A nursery seat comprising a rigid base, a seat member disposed above said base, compression springs disposed between said base and seat whereby said seat is resiliently supported for movement relative to said base, a music box mechanism mounted on said seat member and including a spring motor having a winding stem transverse to the direction of relative movement of said seat and base, a ratchet wheel fixed on said stem, a lever pivoted at its inner end on said stem, a dog pivotally connected to said lever and engaging said ratchet wheel to turn said

ratchet wheel as said lever pivots away from said base, a rod secured at one end to said base and having its opposite end longitudinally slidable in the outer end portion of said lever, a collar fixed on said rod intermediate said base and said lever, and a compression spring carried on said rod between said collar and said lever.

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