Jan. 4, 1938. N. JOHNSON 2,104,653

TOILET SEAT

Filed Oct. 2, 1936

Fig. 1.

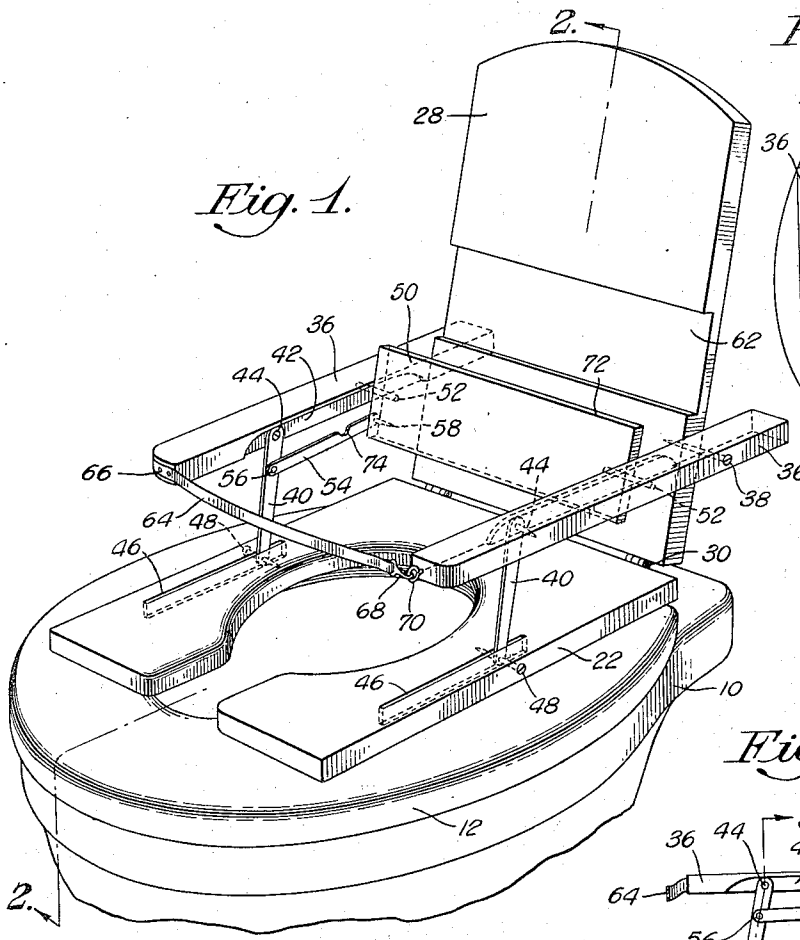


Fig. 4.

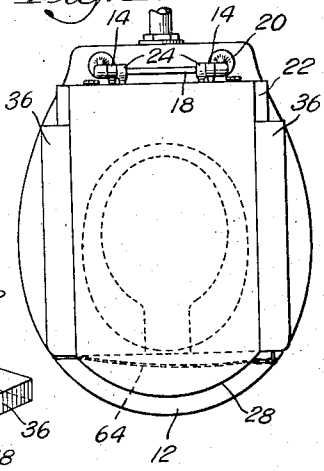


Fig. 2.

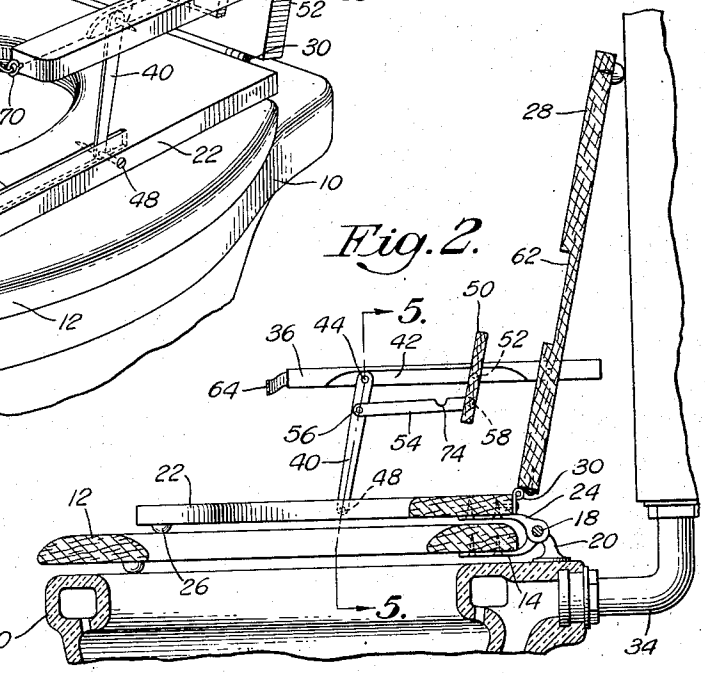


Fig. 5.

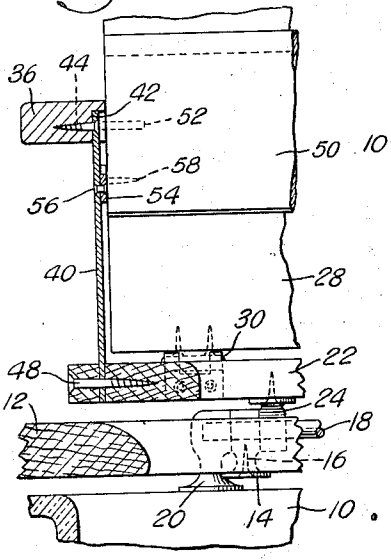
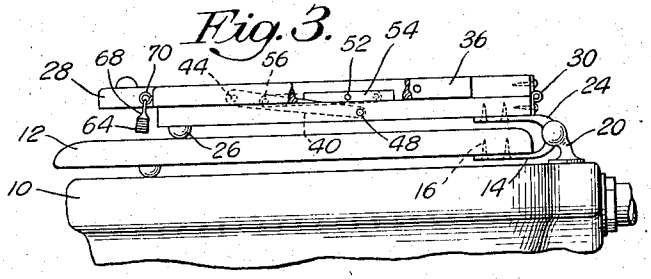


Fig. 3.



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HIS ATTORNEYS

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TOILET SEAT

Nels Johnson, Chicago, Ill.

Application October 2, 1936, Serial No. 103,777

8 Claims. (Cl. 4—239)

My invention relates to closet bowls, and has among its objects and advantages the provision of an improved infant's toilet seat which may be connected with a conventional seat in such a manner as to permit either seat to be used.

In the accompanying drawing:

Fig. 1 is a perspective view illustrating the auxiliary seat in association with a conventional closet bowl;

Fig. 2 is a sectional view along the line 2—2 of Fig. 1;

Fig. 3 is a side view;

Fig. 4 is a top plan view; and

Fig. 5 is a sectional view along the line 5—5 of Fig. 2.

In the embodiment selected to illustrate my invention, I make use of a conventional closet bowl 10 having the usual seat 12 pivotally connected with the bowl. Two hinges 14 are fastened to the seat 12 by screws 16 which are rotatably mounted on a shaft 18 having its ends supported by brackets 20 anchored in the material of the bowl 10 in the usual manner.

Upon the seat 12 I mount an infant's seat 22 of the open front type, which seat is pivotally connected with the shaft 18 through the medium of hinges 24 in the same way as the seat 12. In Figs. 2 and 3, I illustrate the hinges 24 as being shaped in such a manner as to bring the auxiliary seat 22 into parallel relation with the seat 12 when the seat 22 is lowered. Cushioning pads 26 are carried by the bottom side of the seat 22 for holding the seat in spaced relation with the seat 12 so as not to mar the finish thereon.

To the rear end of the infant's seat 22 I pivotally connect a cover 28 through the medium of hinges 30. These hinges are so connected as to permit the cover 28 to lie snugly over the seat 22, as illustrated in Fig. 3. In using the seat 22, the cover 28 may be lifted and swung back to rest on the tank 32 which delivers water to the bowl 12 through the medium of the usual conduit 34. Both the seat 22 and the cover 28 may be lifted as a unit about the axis of the shaft 18 to rest against the tank 32, thus permitting the seat 12 to be used.

I provide the auxiliary seat 22 with arm rests 36, which arm rests are pivotally connected near their rear ends with the cover 28 through the medium of screws 38 which fit loosely within openings in the arm rests but are firmly anchored in the cover 28. Toward the forward ends of the arm rests 36 I pivotally connect two links 40. Both arm rests 36 are recessed at 42, and the links 40 are pivotally connected to the arm rests within the recesses 42 by means of screws 44 anchored in the arm rests. Within slots 46 in the auxiliary seat 22 I pivotally connect the opposite ends of the links 40. Screws 48 pass through openings in the lower ends of the links 40 and are anchored in the seat 22. Between the arm rests 36 I mount a back rest 50 which is arranged in slight angular relation to the vertical when the cover 28 is positioned according to Fig. 2. Pins 52 pivotally connect the back rest 50 with the arm rests 36. The ends of the back rest are arranged substantially in abutting relation with the arm rests 36 but are mounted to pivot freely therebetween.

One link 54 is pivotally connected with one of the links 40 at 56 and with one end of the back rest 50 at 58. The link 54 will lie within the recess 42 of its associated arm when the cover 28 is lowered to the position of Fig. 3. To secure compact relation of the parts I recess the cover 28 at 62, which recess is of sufficient depth to bring the back rest 50 within the contour of the cover 28 with the parts folded according to Fig. 3 so that the cover 28 may lie in contact with the auxiliary seat 22. A strap 64 has one of its ends fixedly connected at 66 with one arm rest 36 and its opposite end provided with a snap 68 for detachable connection with an eye 70 carried by the other arm rest.

In operation, the arm rests 36 are moved into a plane common with the cover 28 when the latter is lowered. Slots 46 and the recesses 42 house the links 40 in the folded position of the parts. When the cover 28 is lowered, the link 54 pivots the back rest 50 in the direction of the arrow 72 for bringing the back rest into a plane common to the arm rests 36 and within the recess 62 in the cover 28. A recess 74 is provided in the link 54 for accommodating the pin 52 associated therewith in the folded position of the cover. It will thus be seen that in the folded position of the parts, all the parts are housed within the auxiliary seat 22 and the cover 28 with the exception of the arm rests 36, which, however, are of the same thickness as the cover 28 and lie snugly upon the auxiliary seat 22, as illustrated in Fig. 3. Merely lifting the cover 28 adjusts the parts to the position of Fig. 1. The auxiliary seat 22 may be lifted off the seat 12 and moved back to lie against the cover 28, at which time the parts will take the compact relation of Fig. 3. At the same time, the seat 12 may be raised to rest against the elevated seat 22. My auxiliary seat structure may be easily associated with closet bowls of conventional construction by merely pivotally

connecting the structure on the shaft 18. In all positions of the cover 28, the arm rests 36 are maintained in parallel relation with the seat 22, while the back rest 50 maintains parallel relation with the cover 28. The relation of the links 46, the arm rests 36, cover 28, and the seat 22 is in the nature of a parallel motion linkage, which is also true with respect to the link 54, one of the links 46, one arm rest 36, and the back rest 50. This arrangement facilitates folding of the parts into compact relation and makes for quick and easy adjustment to the position illustrated in Fig. 1.

Without further elaboration, the foregoing will so fully explain my invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

I claim:

1. The combination with a closet bowl having a seat pivotally mounted thereon, of an auxiliary seat mounted on the bowl, a cover for said auxiliary seat pivotally mounted on the auxiliary seat, a back rest, and an operating connection between the auxiliary seat, the back rest and the cover, to maintain the back rest in substantially parallel relation with the cover in all positions of the latter.

2. The combination with a closet bowl having a seat pivotally mounted thereon, of an auxiliary seat mounted on the bowl, a cover for said auxiliary seat pivotally mounted on the auxiliary seat, a back rest, and an operating connection between the auxiliary seat, the back rest and the cover, to maintain the back rest in substantially parallel relation with the cover in all positions of the latter, said cover being recessed, said operating connection being so constructed and arranged as to move the back rest into said recess in the folded position of the cover.

3. The combination of a closet bowl, a seat, a pivotal connection between the seat and the bowl comprising in part a shaft, an auxiliary seat pivotally mounted on said shaft, a cover pivotally connected with said auxiliary seat, arm rests pivotally connected with said cover, a back rest pivotally connected with the arm rests, and operating connections between the back rest, the arm rests and the auxiliary seat for shifting the said parts into parallel relation in the folded position of the cover.

4. A device of the type described comprising a seat adapted for pivotal connection with a closet bowl, a recessed cover movably associated with said seat, a back rest, and an operating connection between the seat, the cover and the back rest, said operating connection being so constructed and arranged as to move the back rest into said recess in the folded position of the cover, but to move the back rest into supporting position in spaced relation with the cover when the latter is lifted.

5. A device of the type described comprising a seat, a cover hingedly associated with the seat, arm rests pivotally connected with said cover, links movably connecting the arm rests with said seat, a back rest pivotally connected between the arm rests, and an operating connection between the back rest and said first named operating connection, said operating connections being so constructed and arranged as to position the arm rests, the back rest and the cover in parallel relation in the folded position of the cover.

6. A device of the type described comprising a seat, a cover hingedly associated with the seat, arm rests pivotally connected with said cover, links movably connecting the arm rests with said seat, a back rest pivotally connected between the arm rests, and an operating connection between the back rest and said first named operating connection, said operating connections being so constructed and arranged as to position the arm rests, the back rest and the cover in parallel relation in the folded position of the cover, said cover being recessed, said back rest lying within said recess in the folded position of the cover.

7. A device of the type described comprising a seat, a recessed cover hingedly connected with said seat, arm rests pivotally connected with said cover, said seat being slotted, links pivotally connected with said arm rests and pivotally connected with said seat within said slots, a back rest pivotally connected between the arm rests, and a link movably connected with the back rest and one of said first named links, said arm rests lying on said seat in the folded position of the cover with the cover lying between the arm rests.

8. A device of the type described comprising a seat, a recessed cover hingedly connected with said seat, arm rests pivotally connected with said cover, said seat being slotted, links pivotally connected with said arm rests and pivotally connected with said seat within said slots, a back rest pivotally connected between the arm rests, and a link movably connected with the back rest and one of said first named links, said arm rests lying on said seat in the folded position of the cover with the cover lying between the arm rests, said arm rests being recessed to house said first named links, said second named link lying within the recess in one arm rest in the folded position of the cover.

NELS JOHNSON.