July 16, 1968 D. W. HANSEN 3,392,411

AUXILIARY TOILET SEAT

Filed Nov. 24, 1965 2 Sheets-Sheet 1

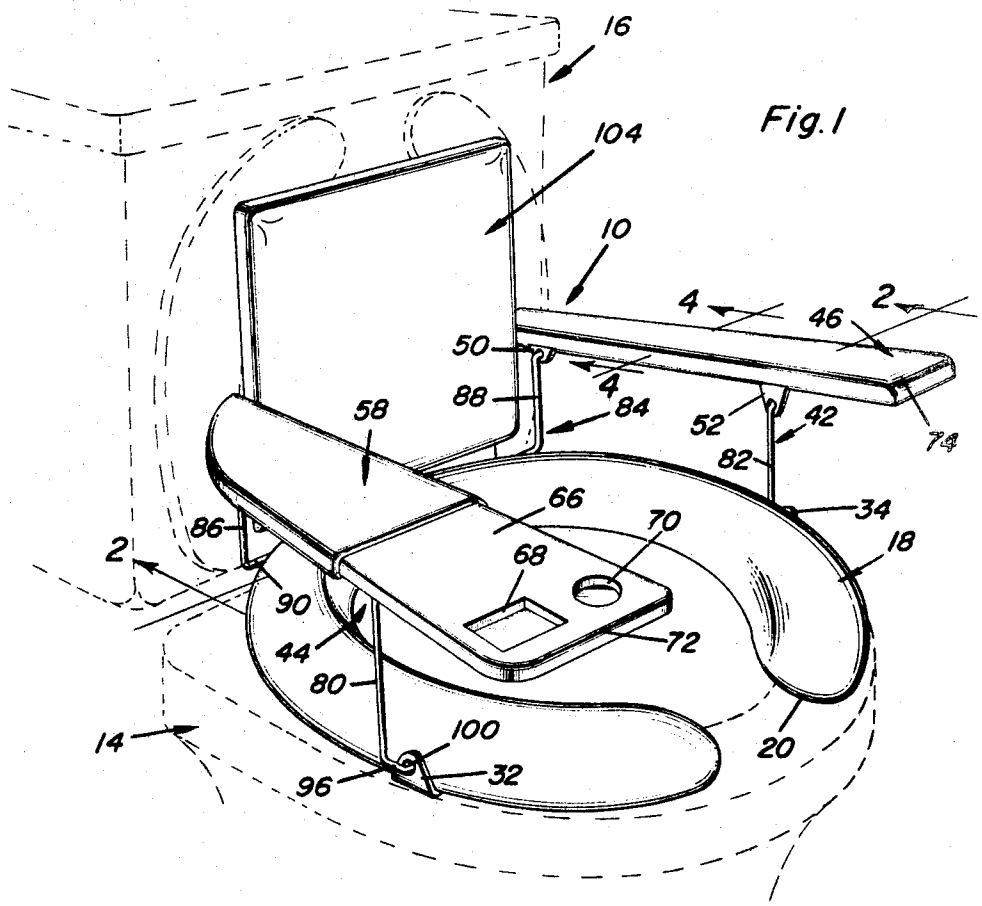
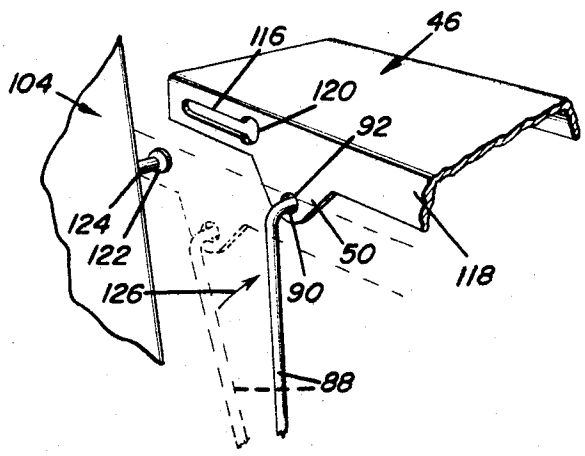


Fig. 1

Fig. 5



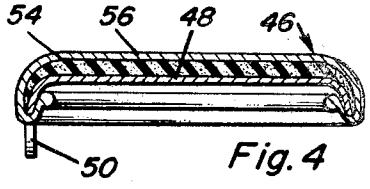


Fig. 4

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AUXILIARY TOILET SEAT

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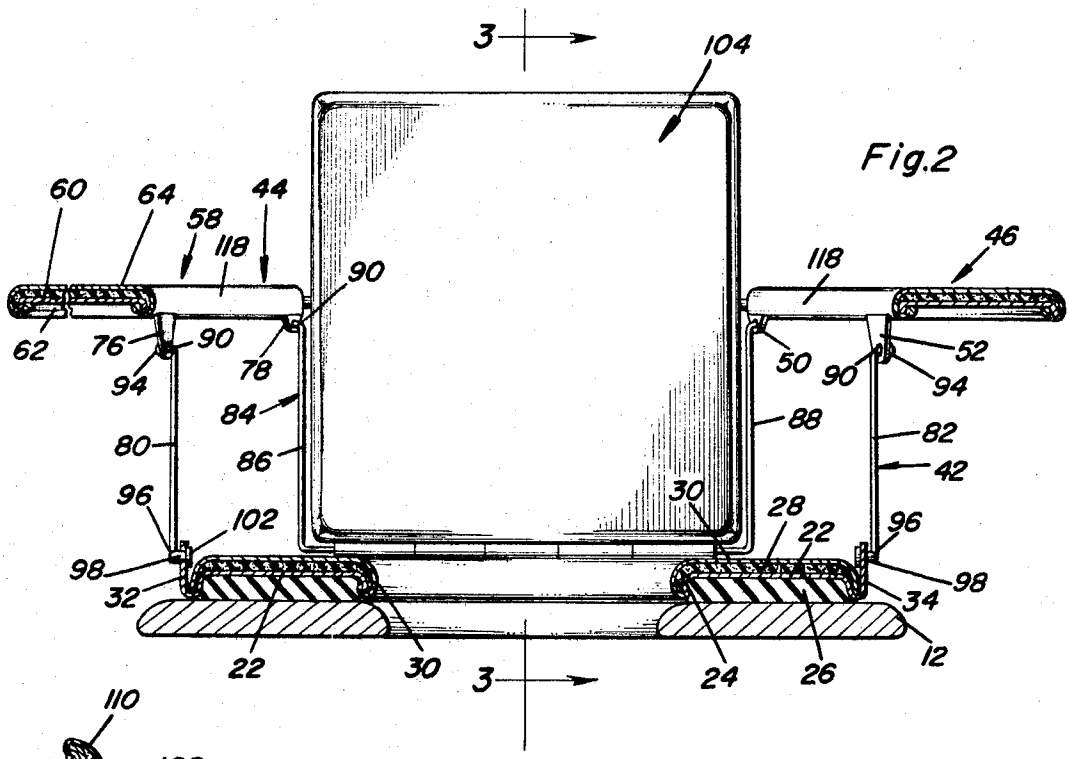


Fig.2

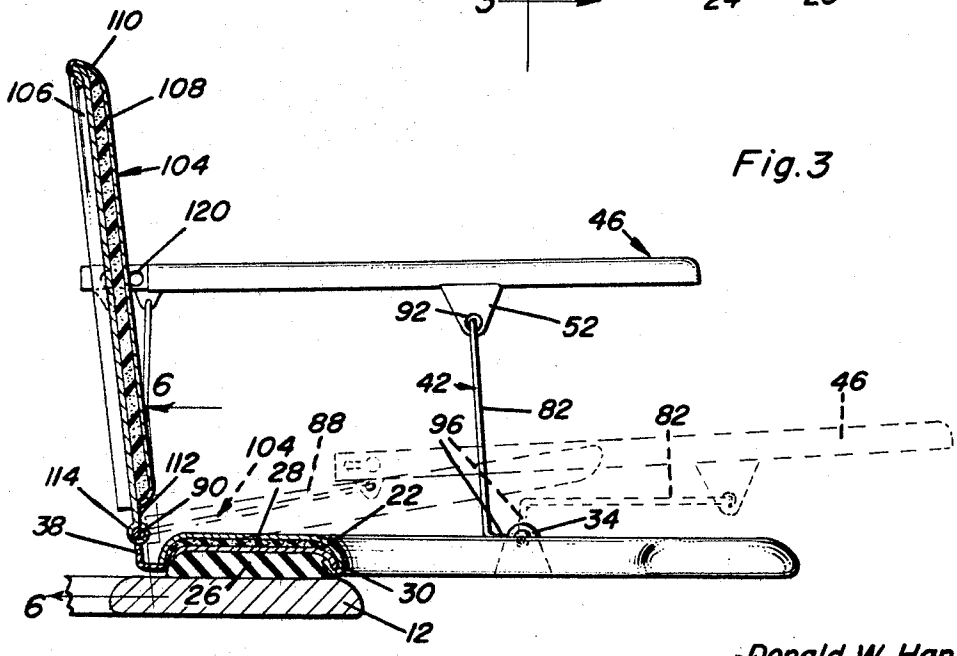


Fig.3

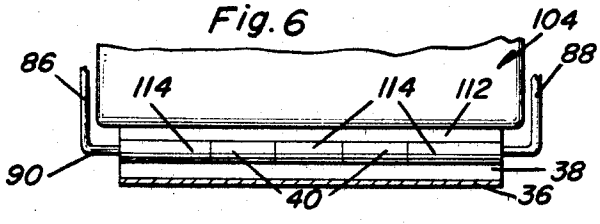


Fig.6

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AUXILIARY TOILET SEAT

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11 Claims. (Cl. 4—239)

ABSTRACT OF THE DISCLOSURE

An auxiliary seat for toilets including hingedly interconnected seat and backrest portions in addition to a pair of arm portions which are foldably secured to the seat portion and releasably engageable with the backrest portion so as to lock the backrest portion in an unfolded position, the arms likewise, in this position, being unfolded for use.

This invention relates generally to furniture, and more particularly to a novel folding seat for use as an auxiliary toilet seat.

Briefly, this invention comprises a padded seat for use on toilets including a backrest and side arms which are also padded, the arms and backrest being foldable against the seat to provide a compact package for shipping or storage of the device. The invention is especially intended to provide a comfortable addition to the generally uncomfortable toilet seat for use by adults of all ages who wish to find comfort in the privacy of the bathroom.

Accordingly, it is a primary object of the present invention to provide novel furniture construction in the form of an auxiliary toilet seat.

It is another object of the present invention to provide a novel auxiliary toilet seat which is padded for comfort yet foldable for storage.

Still another object of the present invention is to provide a novel folding bracket for use on foldable auxiliary toilet seats which bracket prevents folding thereof when the seat is unoccupied.

It is a further object of the present invention to provide a comfortable padded auxiliary toilet seat that is light of weight and inexpensive of manufacture, and which will have a long and useful life due to its sturdy construction.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of the auxiliary toilet seat comprising the present invention in operating unfolded position on a conventional toilet;

FIGURE 2 is an enlarged vertical cross-sectional view taken substantially on the plane of the line 2—2 of FIGURE 1;

FIGURE 3 is a vertical cross-sectional view taken substantially on the plane of the line 3—3 of FIGURE 2 illustrating the auxiliary toilet seat of the present invention in both folded and unfolded positions;

FIGURE 4 is an enlarged vertical cross-sectional view taken substantially on the plane of the line 4—4 of FIGURE 1;

FIGURE 5 is a partial perspective view illustrating the novel locking mechanism of the instant invention;

FIGURE 6 is a partial vertical cross-sectional view taken substantially on the plane of the line 6—6 of FIGURE 3.

Referring now more specifically to the drawings, reference numeral **10** generally denotes the auxiliary toilet

seat comprising the present invention. The auxiliary toilet seat **10** is adapted to be mounted on a conventional toilet including the toilet seat **12**, toilet bowl **14** and water closet **16**. As will be observed in FIGURES 1 and 2, the auxiliary toilet seat **10** may be either mounted on the toilet seat **12** or directly on the toilet bowl **14**.

The auxiliary toilet seat **10** includes a seat generally denoted by reference numeral **18** in the shape of a ring having the conventional frontwardly directed opening **20** therein. The seat **18** includes a metallic shell **22**, the shell **22** preferably being constructed of aluminum or other suitable lightweight sturdy material. The shell **22** is a continuous member being downwardly convex as best illustrated in FIGURES 2 and 3. The shape of shell **22** provides a recess **24** therein for receiving a suitable frictional seat engaging member **26**, the seat engaging member **26** being fixedly mounted in the shell **22** and preferably being a hard rubber or plastic material. Thus, it will be apparent that when the seat **18** is mounted on the bowl or toilet seat, the member **26** will be in direct frictional engagement with the bowl or seat, and thus prevent sliding of the auxiliary toilet seat. The shell **22** further is padded on the upper surface thereof, the padding including a foam rubber pad **28** which is mounted on the upper surface of shell **22** by suitable attaching or mounting means such as glue, paste or the like. Covering the foam rubber padding **28** is an outer cover **30** which is mounted over the outer peripheral surface of seat **18** in any suitable manner, as for example by being folded under the shell **22**, or by having a peripherally extending elastic member therein. The cover **30** is preferably of a washable plastic or fabric material and is removable from the seat **18** in order to be washed or replaced.

The shell **22** includes a pair of upstanding ears **32** and **34** integral therewith and oppositely positioned on the sides of the seat **18**. The ears **32** and **34** have mounting holes therein for a purpose to be more fully explained below. The shell **22** also includes a laterally directed portion **36** at the rear of seat **18**, and the laterally directed portion **36** is bent upwardly into a seat flange **38** as best illustrated in FIGURES 3 and 6. The seat flange **38** has a plurality of half-hinge portions **40** formed thereon for a purpose to be described more fully below.

A swinging frame generally denoted by reference numeral **42** is provided in order to mount a pair of side arms **44** and **46** on the seat **18**. The arm **46** includes an aluminum shell **48** having depending ears **50** and **52** integral therewith, the shell **48** being covered by a layer of foam rubber **54** suitably attached thereto, and an outer cover **56** removably mounted over the foam rubber layer **54**. The cover **56** is similar to the cover **30** described below and is suitably mounted on the arm **46** and is of a washable fabric or plastic material which is removable in order to be washed or replaced. The arm **44** has a padded portion **58** similar to the padding on arm **46** and seat **18**, including a foam rubber layer **60** over the aluminum shell **62**, having a cover **64** thereon which is removably mounted thereon. The aluminum shell **62** is exposed forwardly of the padded portion **58** in order to provide a writing surface **66**, this writing surface **66** comprising an enlarged desk having a rectangular recess **68** and a circular recess **70** therein in which may be received various articles such as glasses, cigarette packages, ash trays, pencils or any other material which the user of the auxiliary seat might feel necessary. Further, the arm **44** is substantially larger than the arm **46**, and the portion denoted by reference numeral **72** is substantially wider than the front edge **74** of arm **46** in order to provide a large writing surface **66**. Further, the shell **62** includes a pair of downturned ears **76** and **78** similar to the ears **50** and **52** on arm **46**.

The swinging frame **42** includes a pair of front bracket

rods 80 and 82 and a single rear substantially U-shaped bracket 84 including upstanding arm portions 86 and 88 and cross portion 90. The bracket rods 80 and 82 as well as the arms 86 and 88 each includes an upper outturned portion 91 which is received in a mounting hole 92 in the appropriate ear 50, 52, 76 and 78. Each of the outturned portions 91 has a head 94 thereon for retaining the outturned portion 91 in the mounting hole 92. Thus, it will be apparent that the arms 44 and 46 are supported at the front end on the bracket rods 80 and 82 and at the back ends on the U-shaped bracket 84.

The bracket rods 80 and 82 each includes a forwardly or offset portion 96 and an inturned portion 98 on the lower end thereof, the inturned portion 98 extending through a mounting hole 100 in the ears 32 and 34 respectively. Further, a retaining head 102 is provided tc secure the inturned portions 98 in the ears 32 and 34. The bottom cross portion 90 of bracket 84 comprises a hinge connecting pin which extends through the half-hinge portion 40 on seat flange 38. Of course, it will be apparent that the cross portion 90 is rotatable in the half-hinges 40. Also, the upper and lower connections of bracket rods 80 and 82 and the upper connections of arms 86 and 88 in the ears of the arms 44 and 46 and on the seat 18 provide rotatable connections, and thus, referring to FIGURE 3, the arms 44 and 46 may be swung from the upper position shown in full lines to the folded position shown in ghost. The offset portions 96 in bracket rods 80 and 82 will cause the arms 44 and 46 to be retained in an upright or operative position illustrated in full lines in FIGURE 3 until such time as are arms are lifted slightly and positively moved forwardly. Only by such positive lifting and movement will it be possible to fold the arms, bracket rods 80 and 82 and rear bracket 84 to the folded position illustrated by the lines in ghost. When the arms are so folded downwardly against the seat 18 the auxiliary toilet seat 10 will comprise a package only about four inches in height.

The auxiliary toilet seat 10 further includes a backrest generally denoted by reference numeral 104, the backrest 104 including an aluminum shell member 106, having the front face thereof covered by a foam rubber padding 108 suitably attached thereto, the padding 108 being covered by a removable washable plastic or fabric cover 110. The shell 106 includes a downwardly extending portion 112 having a plurality of half-hinges 114 integral therewith. The half-hinge portions 114 are adapted to mate with the half-hinge portions 40 on seat flange 38, the cross portion 90 of bracket 84 extending through the half-hinge portions 114 and 40 in order to hingedly or swingingly mount the backrest 104 on the seat 18. Thus, referring to FIGURE 3, it will be apparent that the backrest 104 may be swung from the upright position illustrated by the lines in full, downwardly to the folded position illustrated by the lines in ghost.

Referring now to FIGURE 5, means are provided in order to lock the backrest 104 to the arms 44, 46, thus retaining the arms 44, 46 and backrest 104 in upright or unfolded operating position. The arms 44 and 46 each includes an elongate slot 116 in the inner downturned edge 118. The slot 116 includes an enlarged head portion 120 which is large enough to receive the enlarged head 122 of pin 124, a pair of such pins mounted to extend outwardly of both sides of the backrest 104. The arms 44 and 46 are operatively connected to the backrest 104 by the pins 124, as the enlarged head 122 is positioned through the enlarged portion 120 of slot 116, at which time the arms are moved forwardly so that the pin 124 will be moved into the slot 116. Of course, it will be appreciated that at this time, the arms 44 and 46 are fixedly engaged on the pins 124, but that the arms may be removed therefrom by merely sliding the pin 124 to the forward end of the slots at which time the arms may be moved slightly outwardly off of the pins 124. Of course, as illustrated in FIGURE 5 by the arrow 126, the arms 44 and 46 may be moved slightly outwardly to be disengaged from the pin 124 due to the flexibility of the bracket rods 80 and 82 and the arms 86 and 88.

In view of the foregoing description, it will be apparent that the auxiliary toilet seat 10 of the present invention may be positioned on either a conventional toilet seat 12 or toilet bowl 14, at which time the backrest 104 and arms 44 and 46 may be unfolded to operating position and connected by means of the pins 124 in slots 116. Thus, by means of these pins 124 and slots 116 as well as by the offset portions 96 in bracket rods 80 and 82, the arms and backrest will be retained in upright position. However, if it is desired to fold the auxiliary seat 10, the arms may be removed from pins 124 and then raised slightly and swung forwardly, and the backrest 104 may also be swung forwardly to the folded position illustrated in FIGURE 3. At this time, the unit will be ready for storage or shipping, but will remain ready for quick unfolding for placement on a toilet seat. Thus, the auxiliary toilet seat 10 of the present invention provides an extremely useful and comfortable addition for a conventional toilet, providing both comfort and utility in that it is padded, has a backrest, as well as a writing desk and holder for various articles.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. An auxiliary seat adapted for detachable mounting on an ordinary ring-shaped toilet seat comprising, substantially ring-shaped seat means, means for securing said seat means to the toilet seat, a backrest, means for hingedly attaching said backrest to said seat means for movement between a substantially vertically unfolded position and a substantially horizontal folded position, side arms, means for hingedly attaching said side arms to said seat means for movement between an unfolded position in substantial spaced relation above said seat means and a folded position immediately overlying said seat means, and means for detachably locking said side arms, in their unfolded position, to said backrest, in its unfolded position, for locking said side arms and said backrest in their unfolded positions against movement to their folded positions.

2. The combination of claim 1 wherein said second named hinge attaching means comprises, bracket rod means, means for hingedly connecting said bracket rod means to said side arms at one end and to said seat means at the other end, said bracket rod means being movable from a substantially vertical unfolded position to a substantially horizontal folded position whereby said side arms can be maintained either folded or unfolded, and means in said bracket rod means for releasably retaining said bracket rod means in vertical unfolded position.

3. An auxiliary seat adapted for detachable mounting on an ordinary ring-shaped toilet seat comprising, substantially ring-shaped seat means, means for frictionally securing said seat means to the toilet seat, a backrest, means for hingedly attaching said backrest to said seat means, side arms, means for hingedly attaching said side arms to said seat means, and means for releasably locking said side arms to said backrest whereby said side arms and backrest will be retained in an unfolded operative position on said seat means, said second named hinge attaching means comprising, bracket rod means, means for hingedly connecting said bracket rod means to said side arms at one end and to said seat means at the other end, said bracket rod means being movable from a substantially vertical unfolded position to a substantially horizontal folded position whereby said side arms can be

maintained either folded or unfolded, and means in said bracket rod means for releasably retaining said bracket rod means in vertical unfolded position.

4. The combination of claim 3 wherein said retaining means comprises an offset portion in said bracket rod means adjacent the hinge connection to said seat means, said offset portion extending substantially horizontally when said bracket rod means are in vertical unfolded position whereby said side arms must be moved vertically upwardly a predetermined distance in order to be moved to folded position.

5. The combination of claim 4 wherein the upper body receiving surface of said seat means is padded, a first of said side arms is fully padded, and a second of said side arms is partially padded, said second side arm including a writing desk portion having at least one article receiving recess therein.

6. An auxiliary seat attachment for toilet seats comprising an apertured supplemental seat, means for frictionally retaining said supplemental seat on a toilet seat, a swinging frame comprising first and second forward rods and a rear substantially U-shaped rod, laterally offset portions on the upper ends of said forward rods and said U-shaped rod, side arms received on said offset portions, a backrest, said supplemental seat and said backrest having complemental half-hinges thereon, the bottom portion of said U-shaped rod joining said half-hinges whereby said side arms and said backrest are pivotally connected to said supplemental seat, and means for releasably locking said arms to said backrest whereby said swinging frame will be locked in upright position.

7. The combination of claim 6 wherein said locking means comprises slot means in said side arms, pin means on said backrest, said pin means adapted to be received in said slot means for locking said backrest to said arms, and means for releasably retaining said pin means in said slot means whereby said backrest and said arms are releasably locked in upright position.

8. The combination of claim 7 wherein the upper body receiving surface of said supplemental seat is padded, a first of said arms is fully padded and a second of said arms is partially padded, said second arm including a writing desk portion having at least one article receiving recess therein.

9. The combination of claim 3 wherein said first named hinge attaching means comprises, a half-hinge on said seat means and a half-hinge on said backrest, and pin means extending through and connecting said first and second half-hinges, the opposed ends of said pin means being secured to a pair of rod means which in turn extend from the pin means into hinged engagement with said side arms near the means for releasably locking said side arms to said backrest.

10. The combination of claim 3 wherein said means for releasably locking said side arms to said backrest comprises slot means in said side arms, pin means on said backrest, said pin means adapted to be received in said slot means for locking said backrest to said arms, and means for releasably retaining said pin means in said slot means whereby said backrest and said arms are releasably locked in upright position.

11. The combination of claim 2 wherein said first named hinge attaching means comprises, a half-hinge on said seat means and a half-hinge on said backrest, and pin means extending through and connecting said first and second half-hinges, the opposed ends of said pin means being secured to a pair of rod means which in turn extend from the pin means into hinged engagement with said side arms near the means for releasably locking said side arms to said backrest.

References Cited

UNITED STATES PATENTS

1,089,040	3/1914	Block	297—39
1,675,297	6/1928	Hess	4—239
1,950,016	3/1934	Zuckerman	4—239
1,951,621	3/1934	Mayette	4—239
2,113,704	4/1938	Merrett	4—239
2,382,953	8/1945	Baxter	4—239
2,415,237	2/1947	Dunn et al.	4—239
2,480,812	8/1949	Muller	4—239
2,494,813	1/1950	Hughes	4—239

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