June 4, 1940. W. C. BAXTER 2,203,076

INFANT'S FOLDING TOILET SEAT

Filed March 17, 1939

Fig. 1

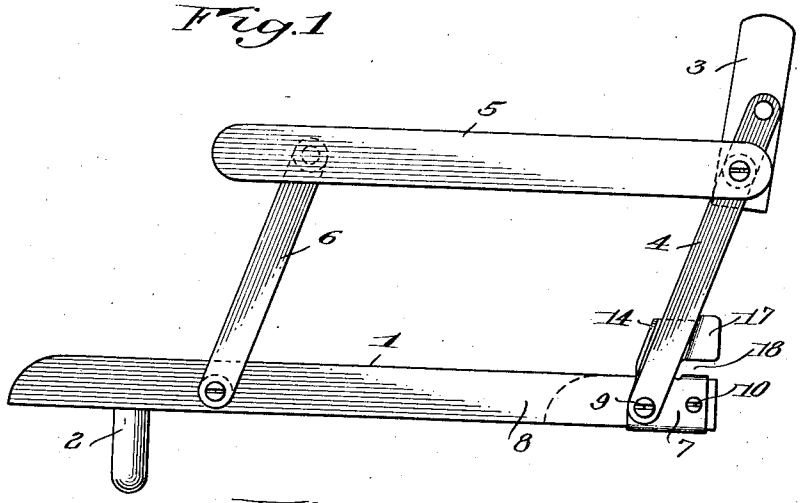


Fig. 2

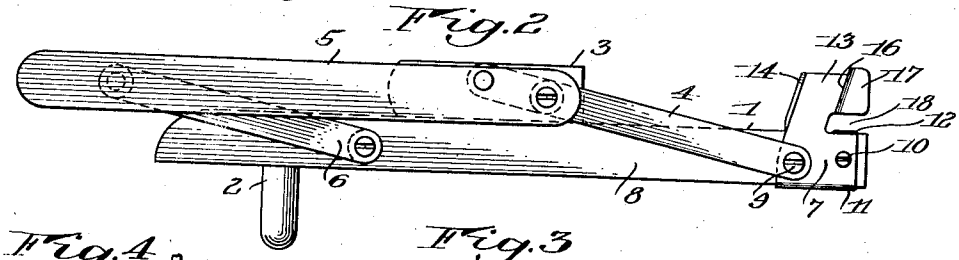


Fig. 4

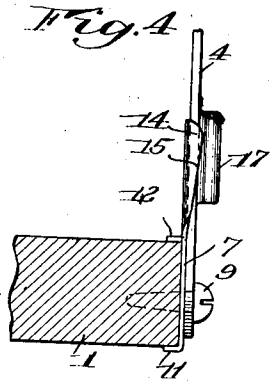


Fig. 3

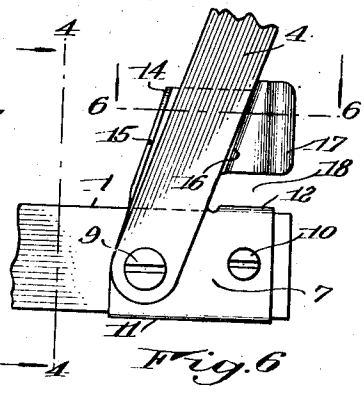


Fig. 5

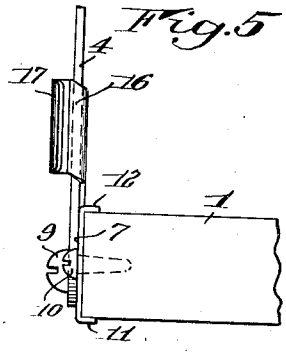
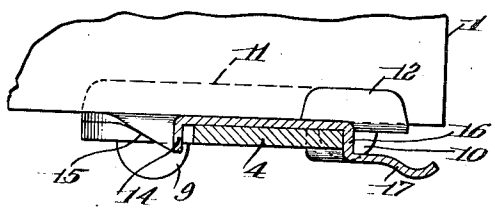


Fig. 6



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INFANT'S FOLDING TOILET SEAT

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Application March 17, 1939, Serial No. 262,549

7 Claims. (Cl. 155—31)

This invention relates to an infant's folding toilet seat of the conventional type that is supported on an adult toilet seat, including a back and side arms that can be collapsed against the seat when the device is not in use, and it has for its object to afford a simple and practical construction which will hold the back and side arms in their upright or operative positions securely, so as to prevent accidental releasing and lowering of the arms and consequent injury to a child's fingers.

A more particular object of the invention is to provide means that will lock the side arms and back firmly and rigidly in their upright positions while permitting quick and easy release thereof to fold the parts when desired.

Another purpose of the invention is to afford a locking means for the purposes mentioned that is of a design which can be economically manufactured, readily assembled, and that additionally strengthens the seat structure while in no way interfering with the otherwise normal and usual operation of the seat.

To these and other ends, the invention consists in the construction and arrangement of parts that will appear clearly from the following description when read in conjunction with the accompanying drawing, the novel features being pointed out in the claims following the specification.

In the drawing:

Fig. 1 is a view in side elevation showing the application of a preferred embodiment of the invention to a conventional type of seat, the back and side arms being indicated in their upper or operative positions;

Fig. 2 is a similar view showing the parts collapsed;

Fig. 3 is an enlarged side elevation of the locking means and link in the position shown in Fig. 1, with parts broken away;

Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 3 looking in the direction indicated;

Fig. 5 is a view in rear elevation of the parts shown in Fig. 3, and

Fig. 6 is a horizontal sectional view on the line 6—6 of Fig. 3.

Referring more particularly to the drawing, in which like reference characters refer to the same parts throughout the several views, 1 designates the usual seat, 2 are depending pins for locating the seat in relation to the larger seat on which it is supported, 3 is the back to which are rigidly connected the links 4, the lower ends of which are pivoted to the seat 1, 5 are the side arms to which the links 4 are pivotally connected, and 6 are the forward links pivotally connected to the arms 5 and the seat 1 and arranged in parallelism to the aforesaid links 4.

In order to maintain the back 3 and side arms 4 in their upper or operative positions, as shown in Fig. 1, against accidental displacement, there is provided locking means for cooperation with one of the links 4. Said locking means preferably consists of a body portion or attaching plate 7 that is located between the side 8 of the seat and the link 4, said link 4 being pivoted to the edge of the seat by means of the screw 9 which passes through the forward part of the attaching plate 7, the latter serving as a wear plate and spacing means between the link 4 and the edge of the seat.

The rear part of the attaching plate 7 is secured to the side of the seat by means of a screw 10 which enters the seat near the rear edge thereof as shown. In order to prevent splitting of the wood of the seat due to the attachment of the screw 10 near the rear edge, and to secure the plate as firmly as possible, it is provided with a flange 11 at its lower edge extending from front to back and embracing the bottom surface of the seat, while the rear portion of the plate 7 is provided at its upper edge with the lateral flange 12 that embraces the top surface of the seat. The flanges 11 and 12 hold the side edge of the seat firmly between them and prevent any splitting or spreading due to the attaching screw 10, while effecting a tight bond between the attaching plate and the seat.

Extending upwardly from the forward portion of the attaching plate 7 above the seat is a laterally yieldable locking portion 13 preferably extending at a slight rearwardly directed angle and provided at its forward edge with the inclined lateral flange or locking surface 14 which engages the front edge of link 4. The flange 14 has a downwardly tapering edge 15, as shown in Fig. 4, to permit the link to ride up over the flange as it is moved upwardly to its operating position.

16 designates an inclined lateral flange or locking surface at the rear edge of the portion 13, arranged to engage the rear edge of the link 4, as shown in Figs. 1, 5 and 6, so that when the link 4 is in its upright or operative position, its front and rear edges are engaged by the flanges 14 and 16 respectively, which act to retain the link as well as the side arms and back in their operative positions.

The attaching plate 7 and locking portion 13 are made of spring metal, and in order to flex

the locking portion laterally so as to disengage the flange 14 from the link 4 and permit collapsing of the side arms and back, the rear flange 16 is provided with an integral rearwardly extending operating piece or finger portion 17 which is arranged at the upper part of the locking portion 16 and spaced somewhat above the flange 12 and attaching plate 7, leaving an opening 18 between the flange 12 and the operating piece 17.

With this arrangement, by pressing against the operating piece 17, the locking portion 13 and flange 14 are moved laterally, due to the yieldable nature of the metal, and the back and link 4 may then be pushed forwardly and collapsed, the spring locking portion immediately returning to its normal or locking position after the link has moved beyond the locking flange 14. arms, it is only necessary to swing them upwardly and backwardly as far as they will go, during which movement the rear edge of the link 4 first

When it is desired to elevate the back and side engages the lower part of the tapered edge 15 of the flange 14, riding upwardly over said tapered edge 15 and thereby forcing the flange 14 laterally until the link 4 has cleared it, whereupon the flange 14 returns to its locking position due to the spring action of the metal, and the link is held in the position shown in Fig. 6.

While the invention has been described with reference to a particular structural embodiment, it is not confined to the details herein disclosed, and this application is intended to cover any modifications or departures coming within the purposes of the improvement or the scope of the following claims.

I claim:

1. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured to the side of the seat and having a laterally yieldable locking portion extending above the seat and including retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it.

2. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured to the side of the seat and having a laterally yieldable locking portion extending above the seat and including retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it and the rear flange terminating in a backwardly bent operating piece for pressing the locking portion laterally to release the link.

3. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured to the side of the seat and having a laterally yieldable rearwardly inclined locking portion extending above the seat and including rearwardly inclined retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it and the rear retaining flange terminating in a backwardly bent operating piece spaced above said attaching plate.

4. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured to the side of the seat and having a laterally yieldable locking portion extending above the seat and including retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it and the rear flange terminating in a backwardly bent operating piece spaced above said attaching plate, and horizontal flanges at the top and bottom of the rear portion of the attaching plate embracing the top and bottom surfaces of the seat.

5. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and said arms and rigidly connected to said back permitting folding thereof, of locking means engageable with one of said links for holding it in its upper position comprising a plate having an attaching portion secured to said seat between the side of the seat and said link and having a laterally yieldable locking portion extending above the seat located in the same vertical plane with the attaching portion and including retaining flanges for engagement with the front and rear edges of the link.

6. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured between the side of the seat and said link and having a laterally yieldable locking portion extending above the seat including retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it and the rear flange terminating in a backwardly bent operating piece for pressing the locking portion laterally to release the link.

7. The combination with an infant's toilet seat comprising a back, side arms, and links pivoted to the seat and connected to said arms and back permitting folding thereof, of locking means associated with one of said links for holding it in its upper position comprising an attaching plate secured between the side of the seat and said link and having a laterally yieldable locking portion extending above the seat including retaining flanges for engagement with the front and rear edges of the link, the front retaining flange being tapered from top to bottom to permit the link to ride over it and the rear flange terminating in a backwardly bent operating piece spaced above said attaching plate, and horizontal flanges at the top and bottom of the rear portion of the attaching plate embracing the top and bottom surfaces of the seat.

WILLIAM C. BAXTER.