The present invention provides a child’s utility device for attachment to toilets and, in particular, provides an extensible and retrievable step by which the child can be elevated when using the toilet. Means are self contained in the structure for supporting the step when in an extended position and also for retrieving the step out of the way for normal adult use of the toilet.

In the preferred form of the invention the step is retrievable or collapsible such that it does not extend more than a negligible amount beyond the supporting structure of the device.

The present invention relates to toilet accommodating structures and, more particularly, to a new and improved utility device for toilet which will make it easy for young children to use small toilets without the aid of their parents.

In the past a number of toilet structures often of reduced size, have been designed specifically for use by children. Some few devices fit over the toilet seat area as well, in order to accommodate young children. With all of the devices presently known there is none that has been designed or currently on the market whereby young children may conveniently use toilet without the aid of mothers and fathers lifting the child. It would, of course, be highly desirable to have a structure whereby a supporting step could be alternatively raised and then placed out of the way, for periodically accommodating small children, this in such a manner that the utility device would not interfere with adult usage.

Accordingly, a principal object of the present invention is to provide a new and improved utility device for toilet structures, which utility device accommodates the toilet practices of small children.

A further object of the invention is to provide a utility device for toilets which can be periodically used by small children, yet may be placed out of the way by children or adults, as desired.

A further object is to provide a utility device structure for toilets of a pivotal nature, readily attachable to the toilet bowl or other structure of the toilet, so as to periodically support a retrievable step.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages thereof, may best be understood by reference to the following description, taken in connection with the accompanying drawings in which:

FIGURE 1 is a plan view of a toilet incorporating its structure of the present invention, the lid and the seat thereof being removed for purposes of clarity.

FIGURE 2 is a fragmentary front elevation, taking all except line 2—2 of FIGURE 1.

FIGURE 3 is a left-side elevation of the structure of FIGURE 1, wherein the step structure has been pivoted in a clockwise direction and dropped downwardly to accommodate adult usage of the toilet.

FIGURE 4 is an enlarged fragmentary section taken along line 4—4 in FIGURE 3, illustrating a representative manner in which the mounting plate of the device may be mounted securely to the porcelain bowl of the toilet, by way of example.

FIGURE 5 is a fragmentary section taken along the line 5—5, illustrating the means by which the step structure is journaled to the remainder of the utility device.

In FIGURE 1 the utility device 10 of the present invention is shown to be mounted upon toilet bowl 11 of a conventional toilet by means of mounting plate 12 of the device. Mounting plate 12 includes a pair of apertures 13 which receive threaded shanks 14, see FIGURE 4, of studs 15. The head 16 of each stud 15 provides a shoulder 17 for securing the mounting plate 12 in position over a preferably included, resilient pad 18.

The toilet seat 19 and lid 20 may take any desired, conventional form and are journaled by suitable means 21 and 22 to the pair of conventional studs 15, one only being shown for convenience of illustration. Plural nuts, one being shown, secure the respective mounting post to the toilet bowl 11 in a conventional manner.

FIGURES 1 and 4 indicate that mounting plate 12 includes a pair of depending ears 25, each having apertures 26 receiving screws or other elongated attachments 27. Washers 28 and thumb-screws 25 may be utilized to secure the apertured ends 30 of elongate, configured arms 21 to the plate 12 at opposite extremities of the latter.

Arms 31 include elongate portions 32 and also leg support portions 33 as indicated in FIGURE 3. Each of the support portions is provided with a resilient cap 34 as indicated. The arms 31, in addition to being supplied with end apertures 35, also include apertures 36 which receive pivot rod 37. Inverted-U shaped portion of members 39 include apertures 40 which are journaled apertures to permit the plural members 39 illustrated, see FIGURE 1, to rotate about axis A. Pivot rod 37 may be threaded at its ends at its respective, opposite ends 42 for the reception of nuts 43. Members 39 each include a respective leg portion 44 and a support portion 45 integral therewith. Attachments 46 secure step 47 to support portions 45 in a manner indicated. Caps 34 are inserted over the ends of leg portions 44 as illustrated, see FIGURE 2.

The structure shown in the drawings operates as follows:

For the accommodation of small children intending to use the toilet, the utility device 10 may be easily disposed in the condition shown in FIGURES 1 and 2. The ends 30 of arms 31 in FIGURE 1 are illustrated as being pivotal about the axis of elongate attachment screw 27.

Hence, a child may easily lift up the arms 31 as indicated in FIGURE 3 and, subsequently, lift up the step structure so that the leg portions 44 are vertical as shown in FIGURE 2. When the child has finished his or her use of the toilet, then the step may be easily returned to its initial position, see FIGURE 3, from that shown in FIGURE 1. The arms 31 may be sufficiently short, see FIGURE 3, so that the inclusion of the structure will in no way interfere with adult use.

Accordingly, it is seen that the present structure provides a means by which young children may be accommodated in their use of bathroom toilet facilities.

It is thus seen that the step structure 47 comprising step 47 and members 39, may be easily erected for child use and, alternately, retracted as desired, as illustrated in FIGURE 3.

While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made without departing from this invention in its broader aspect, and, therefore, the aim in the appended claims is to cover all such changes and modification as fall within the true spirit and scope of this invention.
We claim:

1. A child's utility device for toilets including, in combination, mounting means transversely fastenable to a toilet; a pair of arms pivotally secured to opposite extremities of said mounting means, said arms each including a depending, floor-contacting support portion; and an integral step structure disposed between said arms, pivoted thereto proximate said support portions, and including support means constructed for floor load bearing contact when said step structure is in load supporting position and for movement away from said load supporting position.

2. Structure according to claim 1 wherein said utility device includes a horizontal pivot rod secured to and between said arms proximate said arm support portions, said step structure being secured to said pivot rod.

3. Structure according to claim 2 wherein said step structure comprises a step, a pair of inverted-L-configured support members secured to said step and including depending leg portions, said inverted-L-configured support members being rearwardly journaled to said pivot rod.

4. A child's utility device for toilets including, in combination, mounting means transversely fastenable to a toilet; a pair of arms pivotally secured to opposite extremities of said mounting means, said arms each including a depending, floor-contacting support portion; and a step structure disposed between said arms, pivoted thereto proximate said support portions, and including support means constructed for floor contact when said step structure is in load supporting position, and wherein said utility device includes a horizontal pivot rod secured to and between said arms proximate said arm support portions, said step structure being secured to said pivot rod, and wherein said step structure comprises a step, a pair of inverted-L-configured support members secured to said step and including depending leg portions, said inverted-L-configured support members being rearwardly journaled to said pivot rod, and wherein said step, when in depending condition, extends downwardly a distance not greater than that of said arm support portions, thereby not interfering with contact of the latter with the floor.

References Cited

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Inventor</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>147,348</td>
<td>2/1874</td>
<td>Putnam</td>
<td>4—254</td>
</tr>
<tr>
<td>2,607,926</td>
<td>8/1952</td>
<td>De Puy</td>
<td>4—254</td>
</tr>
<tr>
<td>2,774,975</td>
<td>12/1956</td>
<td>Frank</td>
<td>4—254</td>
</tr>
</tbody>
</table>

HAROLD J. GROSS, Primary Examiner.