Jan. 3, 1939. G. B. BENTZ 2,142,434

BATHTUB SEAT

Filed March 15, 1938

Fig.1.

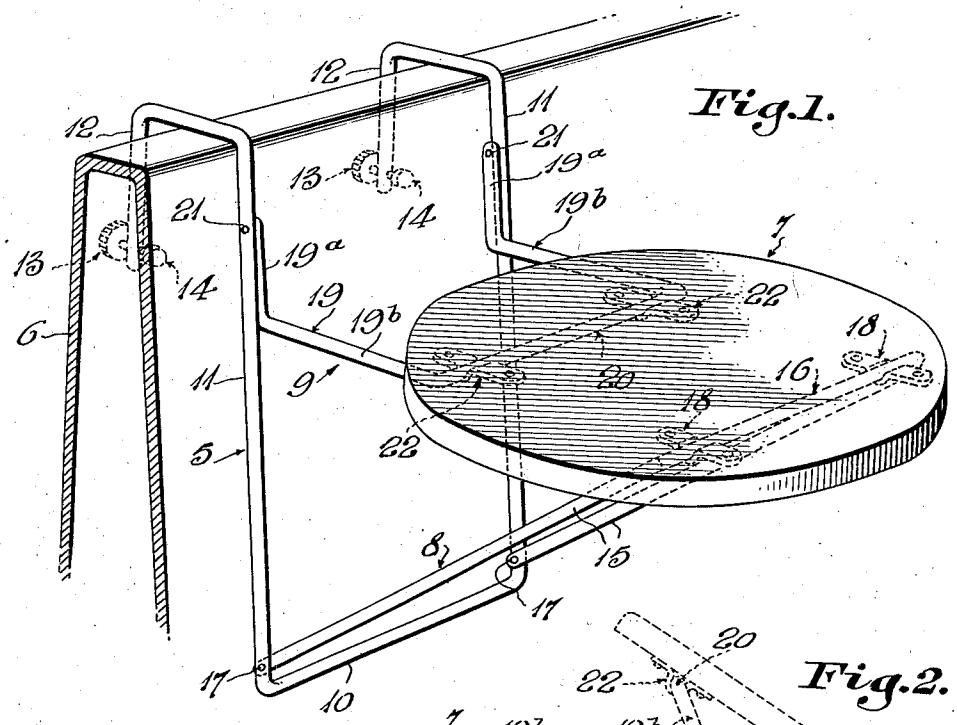


Fig.2.

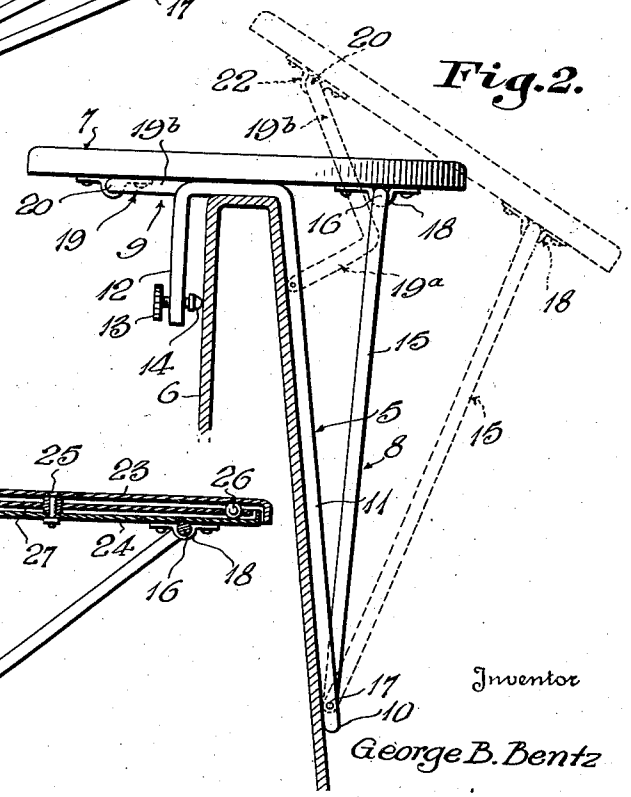
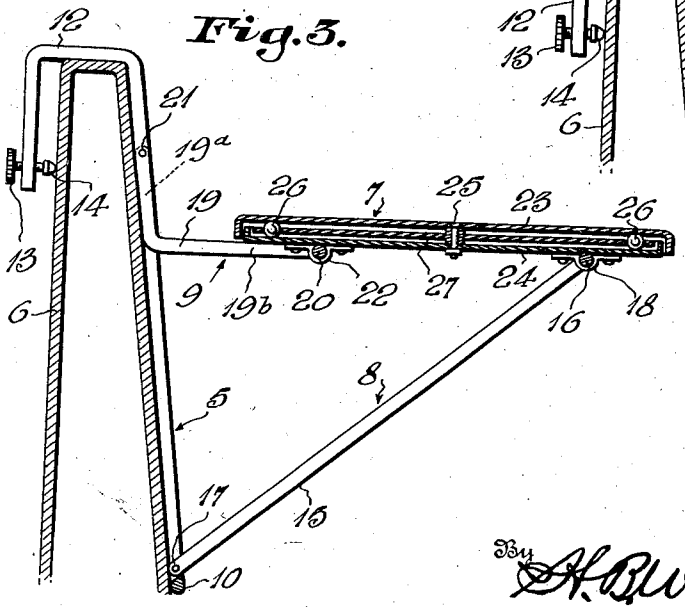


Fig.3.



Inventor

George B. Bentz

By H. B. Williamson & Co

Attorneys

Patented Jan. 3, 1939

2,142,434

UNITED STATES PATENT OFFICE

2,142,434

BATHTUB SEAT

George B. Bentz, New York, N. Y.

Application March 15, 1938, Serial No. 196,070

4 Claims. (Cl. 155—36.5)

The invention relates to improvements in bathtub seats of the general type shown in my U. S. application Serial No. 158,680, filed August 12, 1937, and it aims to generally improve upon and simplify the construction shown in said prior application.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Fig. 1 is a perspective view showing the seat in its lowered position.

Fig. 2 is a side elevation with the tub side wall in vertical section, showing the seat in its raised position in full lines, and in an intermediate position in dotted lines.

Fig. 3 is substantially a central vertical sectional view showing the seat in lowered position and illustrating the fact that said seat may be of rotatable nature if desired.

Preferred features of construction have been illustrated and will be specifically described, with the understanding, however, that variations may be made within the scope of the invention as claimed.

A hanger 5 is provided to hook over a tub side wall 6, a seat 7 of either rotatable or non-rotatable form, is provided to occupy a lowered position within or at the exterior of the tub (Figs 1 and 3) or a raised position over the rim of the tub (Fig. 2). A vertically swingable seat carrier 8 is pivotally connected with one end of the seat 7 and with the lower portion of the hanger 5, to occupy an inclined position when the seat is lowered and a substantially vertical position when said seat is raised, and I provide means 9 for limiting the downward movement of the pivotally connected seat and carrier. In the present disclosure, the hanger 5, the seat carrier 8 and the means 9 are of the constructions described below, with possibilities of variations.

In forming the hanger 5, I preferably make use of a single metal rod 10 having its end portions 11 bent upwardly to provide the equivalent of two vertical rods, the upper ends of which are bent laterally and downwardly to form hooks 12 to hook over the tub rim and support the hanger. The free ends of the hooks 12 are preferably provided with clamping or adjusting screws 13 having rubber-tipped or other cushioned terminals 14 to abut the tub wall without danger of marring the finish thereof.

The seat carrier 8 is formed from a single metal rod bent to provide two links 15 and a shaft 16 connecting the upper ends thereof, the lower ends of said links being pivoted at 17 to the lower ends of the rods 11. One end portion of the seat 7 is provided with suitable bearings 18 rockably receiving the shaft 16.

The means 9 is formed from a single metal rod bent to form two L-shaped links 19 and a shaft 20 connecting said links at one end, the other ends of these links being pivoted at 21 to the upper portions of the rods 11. The end portion of the seat 7 remote from the end portion which is connected with the shaft 16, is provided with bearings 22 rockably receiving the shaft 20.

When the seat 7 is in the lowered position shown in Figs. 1 and 3, the arms 19^a of the L-shaped links 19 project downwardly from the pivots 21 and abut the tub side wall 6, and the arms 19^b of said links project horizontally from said arms 19^a and directly support one end portion of the seat, the other end portion of said seat being then supported by the seat carrier 8. The links 19 and 15 permit easy movement of the seat to the raised position of Fig. 2, the L-shaped links 19 being then inverted with their arms 19^b lying upon the tub rim and coacting with the upwardly swung carrier 8 in supporting the seat 7 in a stable manner. It will be obvious that the seat may be quickly and easily swung from either position to the other without the necessity of releasing any latches or the like, and that it is unnecessary to provide means other than the structure shown for effectively holding the seat in either of its positions. By reference to Fig. 2, it will be seen that when the seat 7 is to be moved from its elevated position to a lowered position, it must initially move upwardly as shown by the dotted lines in Fig. 2. Thus, when the seat occupies its elevated position and is in use, the user's weight prevents the required initial upward movement and therefore prevents accidental movement of the occupied seat to lowered position. The L-shaped links 19 then positively hold the seat 7 against inward or outward movement with respect to the tub wall.

As above stated, the seat 8 may either be of rotatable nature or of non-rotatable form. In Fig. 3, for illustrative purposes, the seat is composed of upper and lower plates 23 and 24 connected by a central pivot bolt or the like 25, and ball bearings 26 are interposed between said plates, said ball bearings being held in predetermined relation by a suitable spider or the like 27 which is rotatable upon the bolt or other pivot 25. When a rotatable seat is provided, it is of particular advantage to aid in entering and leav-

ing the tub, for when said seat is supported in its raised position, a person may sit upon it, raise the legs, and swing the body to rotate the seat, thereby effecting easy movement of the legs over the tub wall.

As excellent results may be obtained from the details shown and described, they are preferably followed. However, within the scope of the invention as claimed, variations may be made as above stated.

I claim:—

1. A bathtub seat attachment comprising a hanger having a supporting hook at its upper end to hook over the rim of a tub wall, an elongated carrier pivoted at one of its ends to the lower portion of said hanger, a seat pivoted at one of its ends to the other end of said carrier to occupy a raised position over said hook and the tub rim when said carrier occupies an upwardly swung position, said carrier being downwardly swingable to an inclined position to dispose the seat at a lowered position and to then support said one end of said seat, and an L-shaped link pivoted at one of its ends to the other end of said seat and pivoted at the other of its ends to said hanger, said L-shaped link supporting said other end of the seat when the latter occupies said lowered position and extending across the tub rim under the seat when the latter occupies said raised position.

2. A bathtub seat attachment comprising a hanger having two vertical rods for disposition at one side of a tub wall, said hanger having hooks at the upper ends of said rods to hook over the tub rim, two L-shaped links pivoted at their upper ends to the upper portions of said rods, two inclined links pivoted at their lower ends to the lower portions of said rods, and a seat supported jointly by said L-shaped links and said inclined links and pivotally connected with all of said links, the relative lengths of said L-shaped and inclined links being such as to allow movement of said seat to a raised position over said hooks and the tub rim, said L-shaped links then occupying inverted positions and extending over the tub rim.

3. A structure as specified in claim 2; together with one rod connecting the lower ends of said L-shaped links, another rod connecting the upper ends of said inclined links, and seat-carried bearings rockably receiving these two link-connecting rods to establish the pivotal connections between the seat and links.

4. A bathtub seat attachment comprising a hanger having a hook at its upper end to engage the rim of a tub wall, a seat movable from a raised seating position over said hanger to a lowered seating position at one side of said hanger, and guiding and supporting means for said seat including an L-shaped link pivoted to said hanger and seat, said link being swingable upwardly to a seat-raised position in which one of its ends underlies the seat and being swingable downwardly to a seat-lowered position in which said one of its ends underlies said seat.

GEORGE B. BENTZ.