

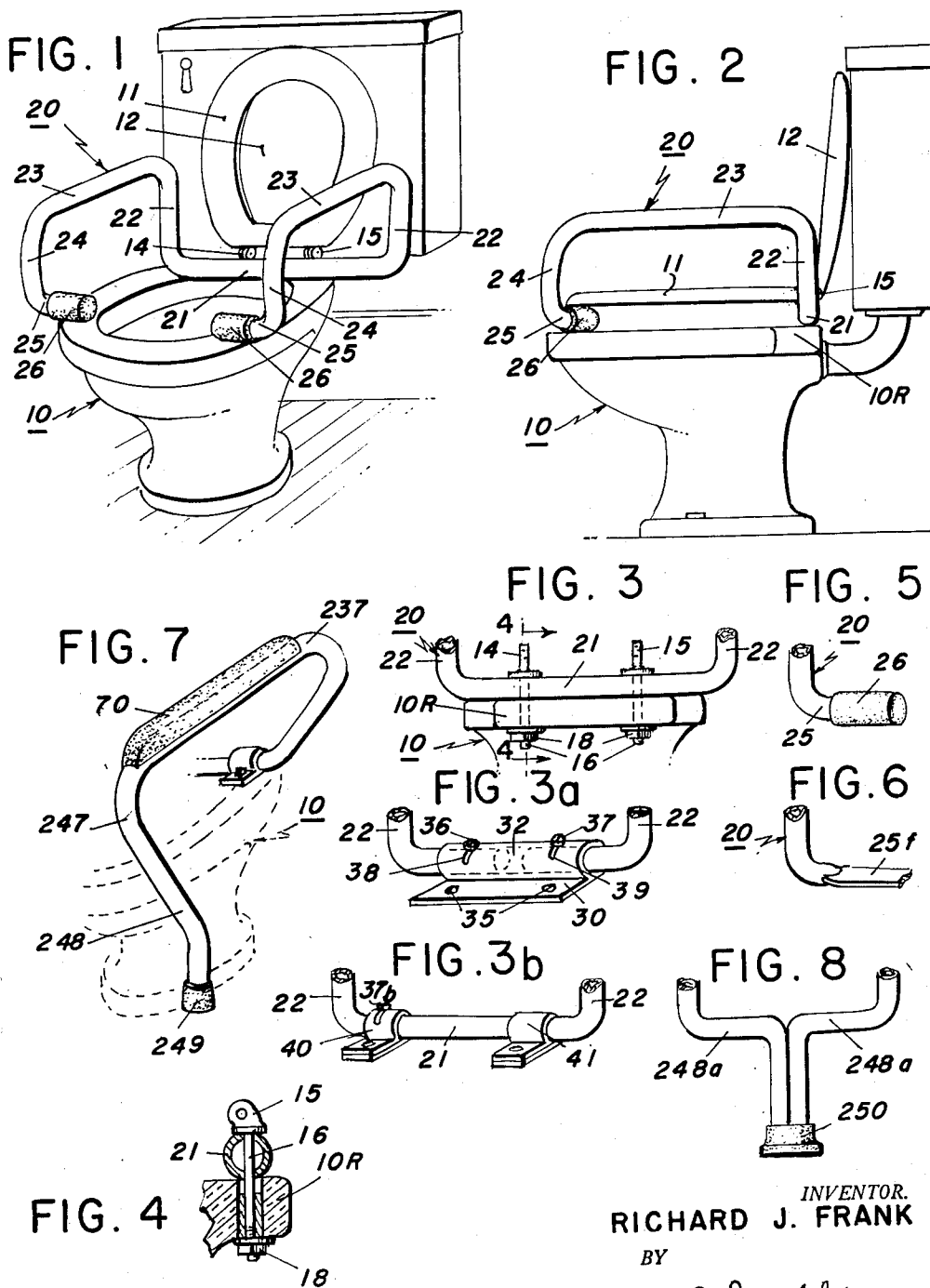
Dec. 25, 1956

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2,774,975

TOILET ARMREST

Filed Nov. 20, 1953



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2,774,975

TOILET ARMREST

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Application November 20, 1953, Serial No. 393,336

2 Claims. (Cl. 4—254)

This invention relates to invalid supports and more particularly to safety arm rests for toilets.

It is the primary purpose of this invention to provide an arm rest for toilet bowls, which will assist those physically handicapped. Through the nature of its support, the average toilet seat possesses a certain degree of unsteadiness and insecurity particularly alarming to partially paralyzed persons and to those whose normal facilities of balance and personal stability are impaired. This invention provides for increasing the general stability of such parts and provides secure arm rests and grips to which the handicapped may transfer at least a portion of their weight. An invalid seating and raising himself from such a toilet seat has in the past been liable to serious falls and devices previously supplied for such support have been both cumbersome, unsanitary and insecure or, alternatively, so heavy and so little adapted for attachment to existing toilet facilities that they must be built into an entirely new structure.

The herein disclosed invention provides a light weight structure readily adaptable and attachable to existing toilet bowls and yet adding to the security thereof while providing the improved safety of arms on either side thereof, all without crevices or pockets wherein germs may breed.

The attached drawing will serve to make clear certain preferred modifications of my invention.

Fig. 1 is an elevation of the toilet bowl having my invention applied thereto.

Fig. 2 is a side elevation of the toilet bowl shown in Fig. 1.

Fig. 3 is a rear elevation of a portion of the toilet bowl and serves to illustrate a method of attachment between it and the improved arm rest.

Fig. 3a is an elevation of a portion of an alternative arm rest and the attachment device therefor.

Fig. 3b is an elevation of another embodiment of the attachment portion of the arm rest.

Fig. 4 is a fragmentary view, taken on line 4—4 of Fig. 3.

Fig. 5 is a fragmentary view of one of the front ends of the arm rest.

Fig. 6 serves to show a second embodiment of structure for the front end of the arm rest.

Figs. 7-8 serve to illustrate further modifications of the arm rest wherein the front end thereof is carried to the floor.

Referring to the drawing, the toilet bowl 10 is commonly provided with a seat ring 11 and a cover 12 both of which are supported by hinges 14 and 15, part of which extend in bolt form through the rear projection 10R of the bowl 10 (see Fig. 4). The front end of the seat is commonly supported on rubber knobs after the fashion well known to the art. I have found it convenient to extend the bolts 16 of the hinges 14 and 15 by such means as an extension nut 18 so that they become long enough to extend through the rear section 21 of my improved arm rest structure 20. In the embodiment

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shown in Figs. 1 and 2 my improved arm rest structure includes a substantially horizontal straight tubular section 21 extending into and part of a unitary tubing device including risers 22, arm portions 23, front portions 24 and support ends 25 as will be seen in the illustrations. The various parts described are joined together by suitable bends in the tubing as shown. The rear portion 21 is preferably drilled, as shown in Fig. 4 and adapted to lie across the rear portion of bowl 10 and to be clamped thereon by the extension bolts and nuts 16 and 18 as has been described. The front end portions 25 may be formed as shown in Fig. 5 wherein the end of the tubing is encased in rubber covering 26 which seals the end of the tubing, provides a secure seat for the arm rest upon the top face of the toilet bowl and at the same time provides a support for the front end of toilet seat 11, increasing the bearing thereof and the seat's stability. Sanitary sealing of parts is also effected.

In some instances it has been found that the increased space beneath the seat 11 and the slight rise in total seat height effected thereby is objectionable. In such instances, I prefer to flatten the end of the tubing as shown in Fig. 6 and to coat the same with latex or other protective film where the same contacts bowl 10 on the under side of seat 11.

The rear connection described in Fig. 3 and which is shown in Figs. 1 and 2 with certain toilet bowls presents a "height" difficulty and I then prefer to provide a fitting 30 having a tubular upper section 32 securely attached to flanges 34 bored as at 35 for the seat bolts. Portion 32 is bored longitudinally to receive the ends of the tubing for the arm rests.

It is further possible with this embodiment to make such arm rests in two parts, entering from either end of fitting 30 and held therein by such means as set screws, 36 and 37 operating in slots 38 and 39 in fitting 30. The last described structure will be seen to also have certain improvements in that the arm rest at either side of the toilet seat may be independently raised for cleaning or for easier access to the seat or bowl. Where the seat arms are to be raised as a common unit, fitting 30 may be subdivided into two fittings 40 and 41 as shown in Fig. 3b, both embracing section 21 of the arm rest and one or both provided with the set screw and slot arrangement of Fig. 3a to prevent end movement in fittings 40 and 41 of the seat rest.

Fig. 7 shows a modification of the arm rest previously described. In Fig. 7, the rear structure described in connection with Figs. 3, 3a and 3b may be used and riser 22a angled outward and upward to convey pressures on arms 237 more directly to the rear structure described. Arm grip section 237 is here preferably capped by a shaped hand grip 70 secured thereto and providing added surface for the hands of the user. Support portion 247 is here bent into front legs 248 extending downward on either side of the toilet bowl to a floor rest 249 as shown. In this instance, the portions shown in Figs. 5 and 6 are eliminated and the toilet seat rests as before upon its own knobs upon the upper surface of bowl 10, while the arm itself transfers the weight of the user directly to the floor. In connection with this last form, I prefer to employ the divided fixture of Fig. 3a so that the toilet floor may be cleaned with greater facility about the foot 249.

Fig. 8 serves to illustrate a secondary modification of the structure described in connection with Fig. 7. In this modification front legs 248a are brought together to the floor in a single floor piece 250 as shown.

Certain other improvements and advantages will appear all within the spirit of my invention and the scope of the appended claims.

What I claim is:

1. An invalid support and arm rest attachment for

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toilet bowls including in operable combination a jour-
 nalled fitting adapted to engage a toilet bowl and to be
 clamped thereto by the bowl's seat retention means, said
 fitting providing attachment, hinging and support means
 for rigid hand-grip members attached thereto and extend-
 ing forwardly and substantially parallel to said bowl on
 either side thereof, said grip members provided each with
 a forward extension and support leg at its front end and
 each said leg bearing independently upon the floor beside
 the bowl.

2. An invalid support for toilet bowls including jour-
 nalled fittings adapted to simultaneously engage the upper
 surface of a toilet bowl and the seat hinge bolts and to
 be held to said bowl by said hinge bolts, said fittings in
 combination with hinging and holding cross members ter-
 minating in riser members at the end thereof and at either
 side of the toilet bowl, said risers joining and support-
 ing substantially horizontal arm rest and hand grip mem-

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bers extending forwardly at the sides of said bowl and
 raised thereabove and leg members at the front ends of
 said arm and hand grip members extending downwardly
 therefrom at either side of the aforesaid bowl to the floor
 therebeneath to further support the arm and hand grips
 and to transfer a substantial part of the invalid's weight
 directly to the floor and thereby relieve the bowl of a sub-
 stantial part of the vertical and lateral strain.

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