

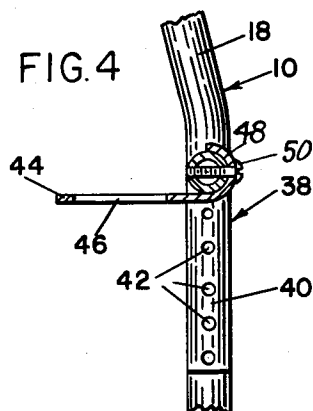
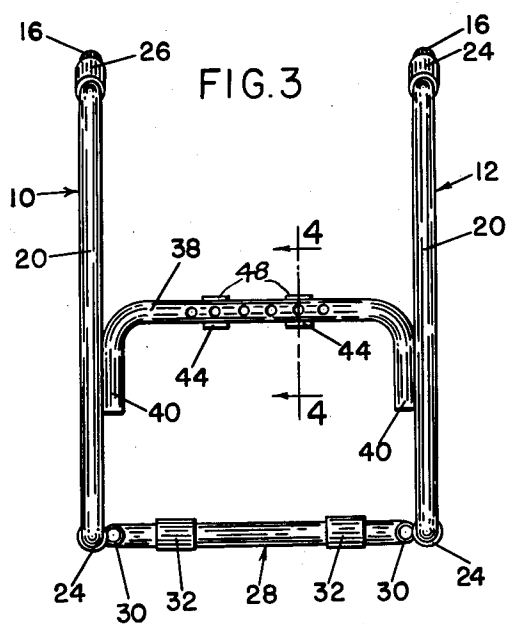
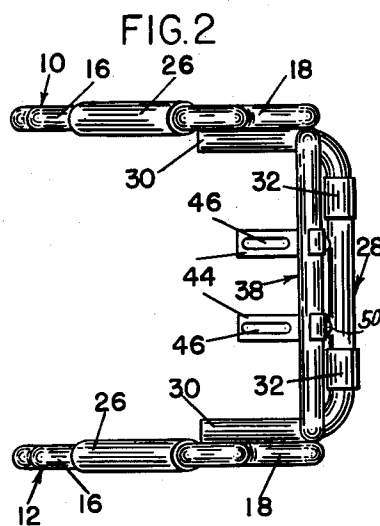
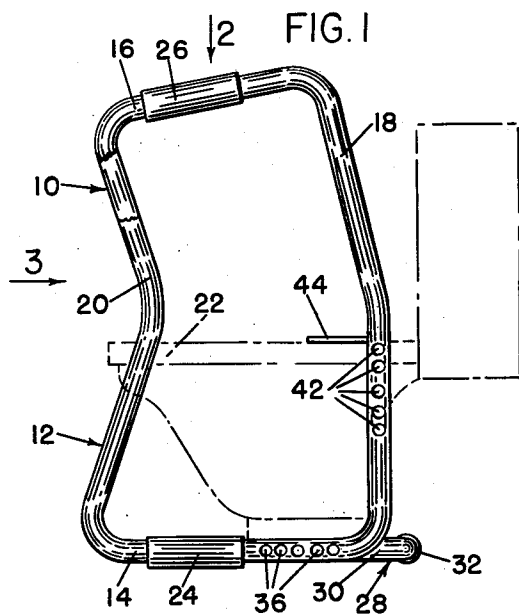
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SAFETY ASSIST FRAME

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SAFETY ASSIST FRAME

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This invention relates to a new and improved assist or safety frame particularly adapted for detachable securement with relation to a water-closet or toilet, for enabling the aged, sick or infirm to utilize the same more easily and providing hand assist rails or the like.

One of the objects of the present invention is to provide a new and improved assist frame including hand grips located one at each side of the toilet and in which the frame includes means for securing the same to the toilet detachably so that the frame cannot slip upon the floor, etc. and is held in useful position, but may be detached and removed from the toilet; the provision of an assist device as described including a simplified construction preferably made of tubular steel, aluminum or the like and including a pair of generally rectangular side frames each of which is provided with a bottom run for support on the floor, a top run which may provide hand grips one on each side of the toilet, a rear run connecting the bottom and top runs at the rear of the toilet, and a front run connecting the bottom and top runs at the front portion thereof, the hand grip runs at the top being slanted downwardly and forwardly for easier operation and gripping thereof by the user; said frame also including a pair of U-shaped members connecting the side frames together, one at the bottom of the device, being adapted to extend in back of the toilet on the floor and another being intermediate the ends of the rear runs and being detachably connected thereto, the intermediate U-shaped member being provided with brackets for securement to the toilet, at the position of the hinge fixture or the like, to the end that the device may be easily set up in place in fixed relation but detached therefrom without any permanent connections or modifications required to be made to the toilet.

The invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly set forth in the appended claims.

Reference is to be had to the accompanying drawings, in which—

FIG. 1 is a view in side elevation showing the new safety frame in relation to a toilet;

FIG. 2 is a top plan view of the frame, looking in the direction of arrow 2 in FIG. 1;

FIG. 3 is a front view of the frame, looking in the direction of arrow 3 in FIG. 1; and

FIG. 4 is a detail view partly in section showing the attaching bracket.

In carrying out the invention, there are provided a pair of side frames which are generally indicated at 10 and at 12. These frames are alike and each one comprises a lower or bottom run 14, a top run 16, a rear run 18, and a front run 20. These members are conveniently made in a single bent piece and the ends thereof may be secured in any way desired. Preferably the front run is bent inwardly to some extent as clearly shown in FIG. 1 so that although the front and rear runs are substantially the same length, the top runs 16 slant downwardly as clearly shown in FIG. 1, for the purpose of providing for an easier grip to be made by the user thereof, it being noted that the runs 16 are located in elevated relation with respect to the toilet which is indicated in dotted lines at 22.

The upper and lower runs are provided with tubular rubber or plastic non-skid members 24 and 26. The members at 26 provide non-slip grips for the user and

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the members at 24 aid the entire frame in maintaining a fixed position upon the floor.

Holding the two frames together and in upright position are a pair of U-shaped members one of which is indicated generally at 28, this being provided with free-ended arms 30, 30. The U-shaped member 28 is horizontal and rests upon the floor and may be provided with non-skid tubular members 32 if desired. This member is adapted to extend to the rear or in back of the toilet itself as clearly shown in FIG. 1 and is adjustably connected with respect to the lower runs 14 by means of conventional fasteners which may extend selectively through a series of holes as at 36, see FIG. 1. This construction firmly holds the frames together at the floor level and the parts are made detachable so as to be capable of being assembled together with a conventional toilet such as at 22 without disturbing the same in any way and also for the purpose of dismantling the device if desired.

The second U-shaped member is illustrated generally by the reference character 38 and it is provided with free-ended legs, see FIG. 3, at 40 and these legs are adjustably secured to the upright portions of the rear members 18 as by conventional fastenings which extend selectively through a series of holes 42 for positioning the member 38 at any desired height with respect to the toilet for the application of brackets 44 thereon to the toilet. These brackets are provided with elongated slots 46 to receive fasteners therethrough for this purpose and this U-shaped member 38 aids the member 28 in holding the frames in predetermined position while leaving the upper portion of the frame completely unimpeded for the use of the occupant while still providing hand grips or the like to carry out the purposes of the invention.

The fasteners used for securing brackets 44 to the toilet bowl are the already present toilet seat hinged bolts which are conventional and substantially the same for all toilet seats. By having the brackets 44 flat and curving up to the rear about the closed run of member 38, see FIG. 4 at 48, the toilet seat is still firmly mounted in the usual way but with the flat brackets on the bowl and underlying the seat. Fastener 50 extends from the rear end and is out of the way and does not interfere in any way with the seat so that the toilet as a whole is not disturbed nor need it be modified in any way to accept and firmly hold the assist device.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. An assist framework construction for toilets comprising a pair of generally rectangular open tubular members, said members each including a lower run, a top run, and connecting front and rear runs, the front run comprising a pair of parts arranged at an inclination with respect to each other, the lower run being horizontal and the upper run being inclined downwardly and forwardly from the rear run to the front run, a horizontal U-shaped member secured to and between said rectangular members at the lowermost runs thereof and spacing and rigidifying the same at the floor level, said U-shaped member being horizontal and connected to and between the rear runs, a second U-shaped member located in a generally vertical plane and extending between and connected to the rear runs of the two rectangular members, the closed end of the second U-shaped member lying in spaced parallel relation to the closed end of the first U-shaped member, and means on the second U-shaped member at the closed end thereof for adjustable and removable securement to a toilet, the forward portion of the framework being open and unimpeded from top to bottom.

2. The assist framework construction of claim 1 in-

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cluding means for securing the second-named U-shaped member in vertically adjustable relationship on said rear runs.

3. An assist device for a toilet comprising a pair of side frame members and means detachably connecting said side frame members and spacing the same apart a predetermined distance, each side frame member comprising a continuous tubular member including a bottom run, a rear run, a top run and a front run, and the means connecting the frames together including a U-shaped member having free-ended legs, means for detachably securing each free-ended leg to a side frame member at the rear portions of the bottom runs thereof, and a second U-shaped member having free-ended legs adjustably connected to the rear runs of said frame members, and brackets attached to the second-named U-shaped members at the closed end thereof for detachable connection to the toilet, both U-shaped members being located at the rear portion of the device and being adapted to be located at the rear of the toilet, being detachable therefrom, the front of the device being open, free, and completely unimpeded.

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4. The assist device of claim 3 wherein the brackets are flat, and including means for detachably and adjustably connecting the flat brackets to the toilet bowl by the usual hinged seat bolts.

5. The assist device of claim 3 wherein the brackets are flat and extend forwardly from underneath the closed end portion of the second U-shaped member and curve up and to the rear of the same, and including fasteners extending horizontally from the rear of the closed end portion and passing through the curved up part of the brackets.

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