United States Patent [19]

McPhee

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[54] **HOSPITAL PATIENT CARE UNIT**

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[52] **U.S. Cl.** **4/10,** 4/6, 4/110, 4/134, 4/DIG. 2

[51] **Int. Cl.** **E03d 1/00,** E03d 3/00, E03d 5/00

[58] **Field of Search** ..... 4/110, 3, 6, 134, DIG. 2, 4/10

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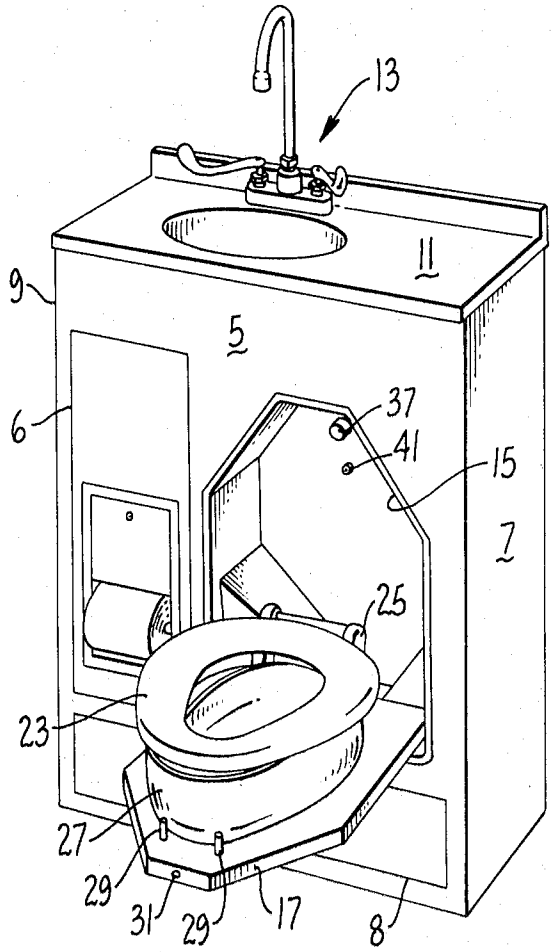
Primary Examiner—Henry K. Artis

Attorney, Agent, or Firm—Robert G. Slick

[57] **ABSTRACT**

A hospital patient care unit is provided which consists of a folding toilet in a compact cabinet wherein the bowl of the toilet is removable so that the unit can be used either as a bedpan or in the normal manner. The unit is designed so that when it is closed, the bowl is automatically flushed and washed out and an interlock prevents opening the cabinet while the flushing operation is taking place.

3 Claims, 5 Drawing Figures



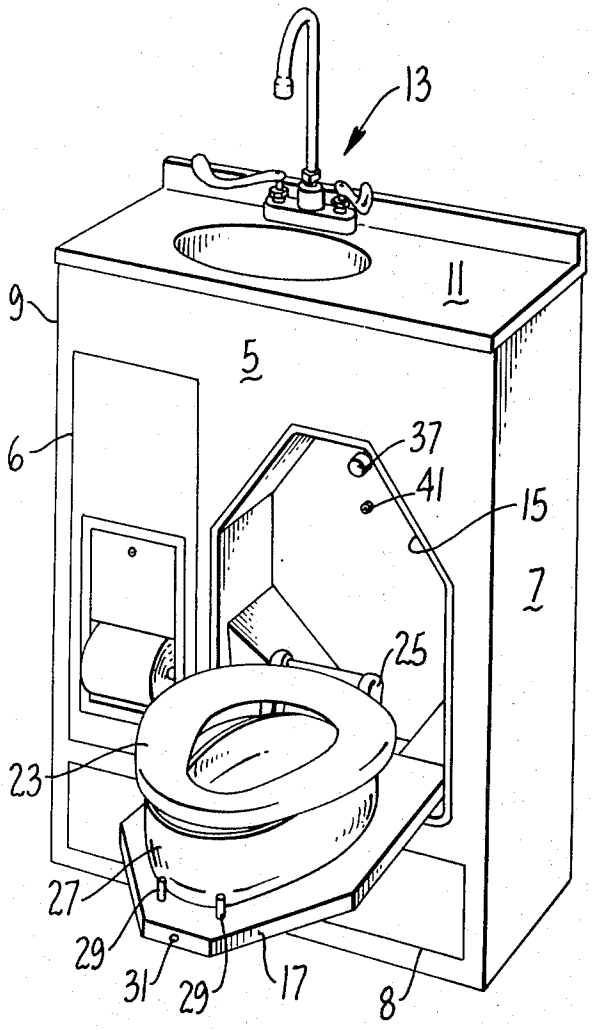

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FIG. 1.

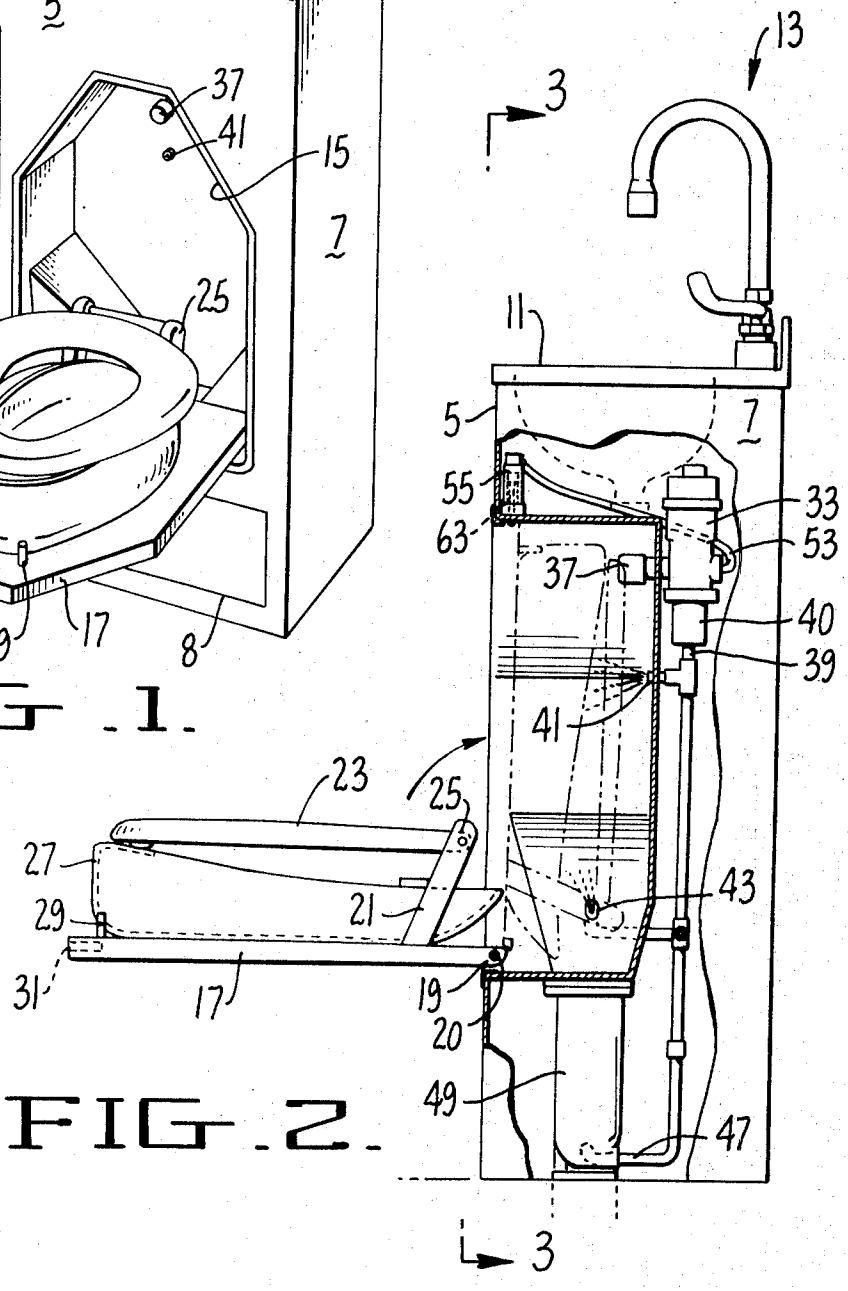

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FIG. 2.

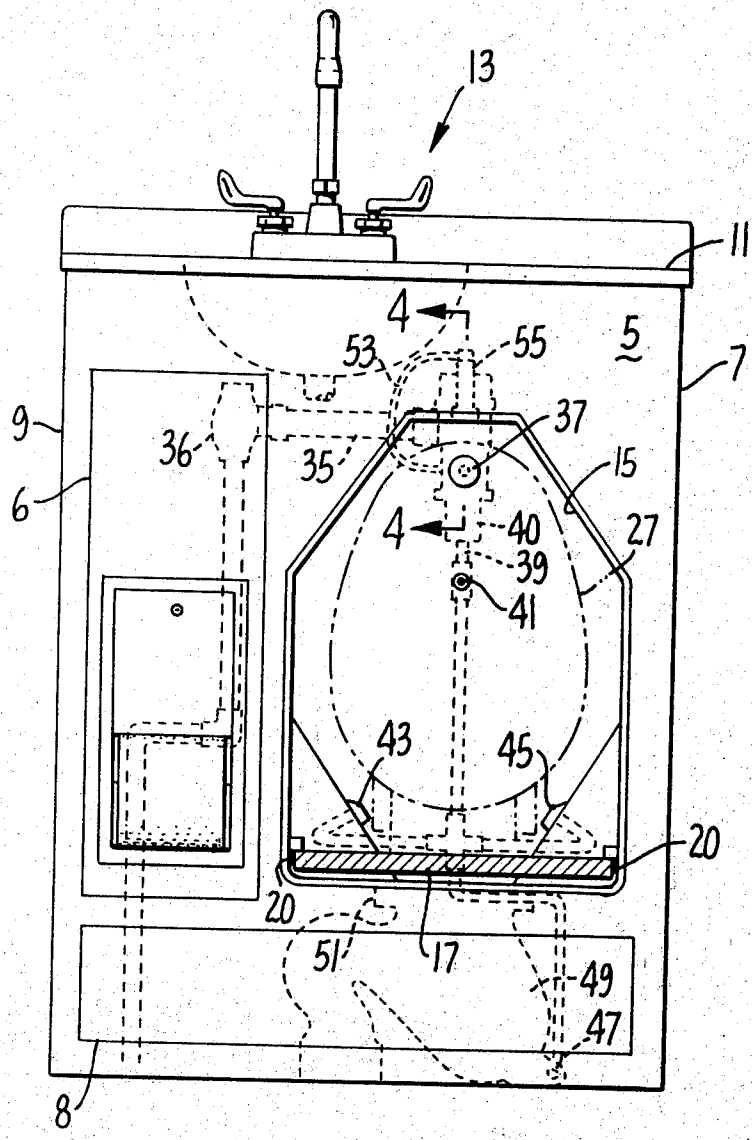


FIG. 3.

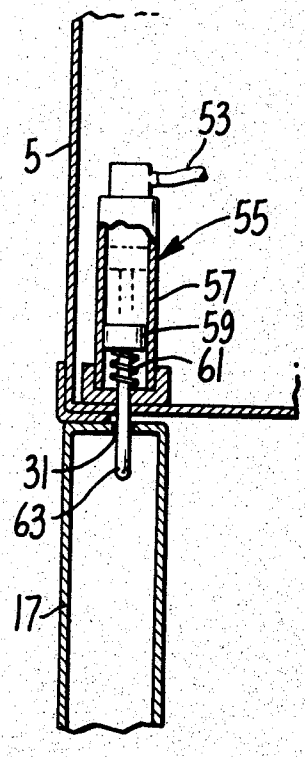


FIG. 4.

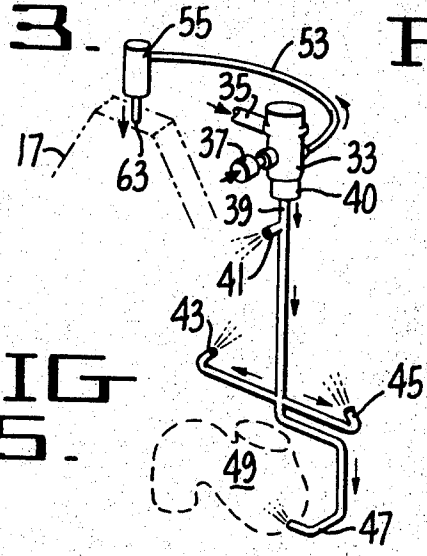


FIG. 5.

HOSPITAL PATIENT CARE UNIT

SUMMARY OF THE INVENTION

The present invention relates to a hospital care unit which consists of a toilet which folds into a cabinet. The bowl portion of the toilet can be removed and used separately as a bedpan. When the bowl is in position the cabinet can be closed whereupon the unit automatically flushes and washes out the bedpan. An automatic interlock prevents opening the cabinet while the flushing operation is taking place.

The unit is very compact and in a preferred embodiment of the invention extends outwardly only one foot from the wall on which the unit is mounted while the cabinet is in the closed position.

It is relatively inexpensive and encourages patients to take care of their own needs as early as possible and minimizes personnel work load.

In coronary care rooms a patient is wired to wall mounted instruments near his bed. As his condition improves he is encouraged to become ambulatory and the proximity of the HPC unit to his bed permits use of the unit as a toilet.

The unit lends itself to being combined with a lavatory so that all of a room's plumbing needs can be taken care of in one compact unit. Since the bowl or convenience receptacle is removable, it lends itself to ready use for stool examination and provides a simple means for measuring a patient's output in coronary care rooms where the intake and output is important to diagnosis and treatment. The convenience receptacle is preferably formed of stainless steel and is easily sterilizable.

The cabinet itself has removable access panels so it is easy for plumbing hookup and maintenance operation.

The unit is designed for use with a standard flush valve so that special parts or fittings are unnecessary and maintenance parts are readily available.

The patient care unit of the present invention has a number of other advantages over structures proposed in the past and these additional advantages will be brought out in the balance of the specification.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a patient care unit embodying the present invention showing it in the open position.

FIG. **2** is a side view of the unit shown in FIG. **1,** partly in section.

FIG. **3** is a front view on the line **3—3** of FIG. **2.**

FIG. **4** is an enlarged sectional view on the line **4—4** of FIG. **3** of the interlock which prevents opening the unit while the flushing operation is taking place.

FIG. **5** is a piping diagram of the flushing unit.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings by reference characters, the unit of the present invention is housed in a cabinet having a front panel **5,** with access panels **6** and **8.** The cabinet also includes side panels **7** and **9** and a top work surface **11.** The top surface **11** may be provided with the usual lavatory fittings, including a washbowl, all generally designated **13.** At the front of the cabinet an opening **15** is provided and near the bottom of this opening a support member **17** is mounted by

means of a hinge **19** with spring loaded hinge pin **20** to permit removal for thorough cleaning. Support unit **17** is mounted in such a manner that when it is in a closed position it will lie flush with the front panel **5** and thus forms a door. Uprights **21** support a toilet seat **23** which is provided with the usual hinge mounting **25.** A bedpan or convenience receptacle **27,** preferably formed from two pieces of stainless steel, is provided which rests on the support frame **17** and is held in position by pins **29** and the support arms **21.** Receptacle **27** is not fastened down so that it is readily removed for use in another location, yet is held in the desired place by the means described. At the front of support member **17** a hole **31** is provided which serves to lock the support member in the upright or closed position while the flushing action is taking place as is hereinafter described in detail.

Mounted within the cabinet is a standard flush valve **33** which is connected by suitable piping **35** through stop valve **36** to a water source, not shown. The flush valve includes the usual pushbutton **37** which is actuated by pressure from the toilet seat **23** when it is in the upright position as is best seen in dot dash lines in FIG. **2.** A first pipe **39** leads from the flush valve through a vacuum breaker **40** to a central nozzle **41** and bottom nozzles **43** and **45** which squirt against the convenience receptacle thoroughly flushing it and washing the contents down the drain. To further assist in the flushing operation, a nozzle **47** is provided in trap **49** so that any solid matter is positively washed from the trap. The top of the trap **49** is enlarged as at **51** for the reception of the material from the convenience unit. Another line **53** leads from flush valve **33** to interlock **55.** Interlock **55** consists of a cylinder **57,** having a piston **59** mounted for reciprocation therein, the piston being normally held in the up position by a spring **61.** A pin **63** extends downwardly from piston **59** and when water pressure is applied through line **53,** pin **63** is driven downwardly into the hole **31,** positively locking support member **17** in the closed position. This prevents any splashing from the unit which might result in soiling the clothes of a person who actuated the flushing operation. After the flushing operation is complete, the pressure falls in line **53,** allowing pin **63** to move upardly, releasing the support member **17** so the unit is now ready for a repetition of the operation.

It is believed apparent from the foregoing that I have provided a hospital patient care unit which occupies little space, which is simple in construction and which can be used as an ordinary toilet or as a flushing unit for a bed pan.

I claim:

1. A hospital care unit comprising in combination:

a. a cabinet,

b. a door on said cabinet, said door having a horizontal hinge at the bottom thereof,

c. a stop mounted between said cabinet and said door whereby said door can be opened outwardly and held in a horizontal position and folded upwardly into said cabinet into a vertical position wherein said door is flush with the front wall of said cabinet,

d. a toilet seat hinged on said door by a bracket extending upwardly from said door whereby said toilet seat is spaced from said door and can be swung to a horizontal position or to a vertical position while said door is in the horizontal position,

e. clamp means on said door, and

f. a bedpan unit removably held by said clamp means whereby said bedpan can be used as a normal toilet or separated and used as a toilet elsewhere.

2. The patient care unit of claim **1** wherein flushing means is provided within said cabinet, said means being actuated by closing the door of the toilet unit.

3. The hospital patient care unit of claim **2** wherein an interlock is provided whereby said door is locked in the closed position while the unit is being flushed.

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