COMBINATION FLUSH-TYPE TOILET AND BEDPAN

Fig. 1.

Fig. 2.

Fig. 9.

Fig. 12.

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This invention relates to new and useful improvements in portable flush-type water closets and apparatus, more particularly, to a multiple purpose toilet and/or bedpan which is primarily adapted to practical bedside usefulness in hospitals, clinics, sick rooms and the like in a manner to assist and satisfactorily accommodate bedridden, convalescent and other patients who are called upon to use a toilet, bedpan, or both.

An outstanding object of the invention is to structurally, functionally and otherwise improve upon prior art structures having to do with combined toilet and bedpan apparatus and structures equipped with flush-type plumbing facilities, the same being characterized by a basin-like bowl or, alternatively, flush-type bedpan and supporting means which is freely shiftable from place to place in a room so that the latter may be utilized at selected points of vantage, said bowl being liftable and portable while on the supporting means, whereby to permit same to assume predetermined horizontal low and high positions for selective and serviceable use as (A) a regular toilet on the one hand, and (B) a bedpan on the other hand.

More explicitly, the invention has to do with a dual purpose construction which embodies a rollable bodily shiftable base, a perpendicularly raisable and lowerable bowl supported for use on said base, a flush valve equipped conduit for supplying water under pressure to said bowl, said conduit being elongated and flexible in form and operatively connected with the bowl and a source of water supply, a second conduit also connected to the bowl at one end and connected at its opposite end, directly or indirectly, to a waste or soil pipe, said second conduit being elongated and flexible and both of the conduits being of substantial lengths and adapted to trail and accommodate the variable positions of the bowl in a manner to permit said bowl to be freely shifted about from place to place in the room and employed where wanted, said base, in its preferred form, including a toilet high stand and bed-high upright means allowing the bowl to be moved toward and from the stand, whereby to permit said bowl to be elevated and lowered to predetermined horizontal low and high positions for selective use as a regular toilet on the one hand and a bedpan on the other hand.

More importantly, in reducing to practice the various phases of the instant invention, I contemplate the adoption and use of a flush-type dual purpose bedpan or toilet with special adapt-
trap and to insure the presence of an effective water seal at all times.

A still further object of the present invention is to provide stationary flush valve and stationary trap means properly communicating with a shiftable bowl by way of flexible contractible and extensible hose lines, there being a remote control cord provided which has a conveniently located finger ring situated immediately on the bowl for satisfactory and ready usage by the user of the bowl.

In addition, it is an object of the invention to provide a bowl having a special top construction which includes, as a part thereof, a rotatably and removably mounted annulus forming a seat when used as a flush-type bedpan, this having an upstanding shield at one end employable as an anti-splash guard to reduce likelihood of soiling user or bedclothes, said annulus having a handle and being turnable so that the shield may be placed at either end and so that the bowl may be conveniently used between parallel beds and by the occupants of either bed.

Then too, novelty is predicated upon a special top construction for the bowl which includes a portion constituting a hood, this overhanging the discharge opening and serving to concentrate the outgoing waste, to subdue the turbulent flush water at this point, to minimize the possibilities of splashing the patient and to facilitate breaking up fecal matter so that it is reduced to readily dischargeable form.

In addition to the foregoing, another object of the invention is to provide novel and improved hose means wherein, preferably, both hose lines are built into a unitary arrangement and wherein said hose lines are of accordion-like form, are extensible and contractible and are provided with embedded retraction elements so that when the bowl is "down" the hose lines automatically recoil and shorten, and when the bowl is "up" they are stretched and conveniently lengthened to meet requirements.

Still another object of the invention is to provide a portable stand-like rack or base which is provided on one longitudinal side of the bowl with special devices which serve to hold a regular toilet seat in readiness for optional use, the means being such that the seat is normally positioned in an out-of-the-way position but is susceptible of being lifted and swung to take a horizontal position over the seating annulus on said bowl.

Reverting to my previously named patent and with further reference to the aforementioned "stripping" the bowl of the stated flush valve and trap facilities, one other important thing which I strive to accomplish here is satisfactory ways and means which will effectively flush and empty the bowl (or bedpan as it is alternatively described). Therefore, an objective of paramount importance is to provide a unique flush rim whose passages (ports or nipples or both) are scientifically grouped and divisible into reasonably definite arrangements heretofore identifiable as main and auxiliary batteries. More important, however, is the fact that we are dealing here with a shallow bowl than and that the discharge for water and fecal matter is at the narrowed end substantially in a plane with the floor of the bowl. There must not be a swirling of water jets and, by all means, there must not be turbid and gyser spiralling for then the patient would be uncomfortably splashed. Consequently, it is an object of this invention to have the main battery, opposite to the discharge end, to shoot the jets against the end wall surface or "splash-board" and to thus baffie and blend same into a sheet-like main stream which finally deeps down from said flush rim to the bottom and then follows the contour of the floor of said bowl straight to the discharge opening; and, simultaneously to progressively cant the passages of the auxiliary batteries so that the jets therefrom play upon forward and rearward wall and back areas but are projected essentially toward said discharge opening, whereby three streams, one central and two side streams, forcibly empty the bowl, cleanse it thoroughly and, what is more important, avoid cross-crossing and turbulent splashing.

Other objects, features and advantages of the invention will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a complete assembly view showing the supporting means, the bowl in raised position in full lines over a mattress, in lowered position in dotted lines and further illustrating the remote controlled stationary means on the wall, and stationary trap on the floor.

Figure 2 is a top plan view of the bowl showing the manner in which the conventional type toilet seat is employed whenever necessary or desired.

Figure 3 is also a top plan view of the bowl, showing the toilet seat rack in an out-of-the-way position and illustrating the built-in seat annulus, forming a selectively adjustable part of the top of said bowl.

Figures 4 and 5 are views taken on the lines 4--4 and 5--5 respectively of Figure 3, looking in the direction of the indicating arrows.

Figure 6 is an enlarged fragmentary sectional view on the line 6--6 of Figure 5.

Figure 7 is a top plan view of the bowl proper with the top removed.

Figure 8 is a fragmentary sectional view through the flushing rim, this taken on the line 8--8 of Figure 7.

Figure 8c is a similar view showing the rim with apertures instead of nipples.

Figure 9 is an enlarged fragmentary sectional view on the line 9--9 of Figure 3.

Figure 10 is a top plan view of the portable support with all of the parts removed for clearness of illustration.

Figure 11 is a view showing a modified form of supporting base.

Figure 12 is a longitudinal or horizontal sectional view taken through the bowl, looking up, and showing a modified type of flush rim construction.

Figure 13 is a fragmentary sectional view through a portion of the double hose construction.

Figure 14 is a cross sectional view on the line 14--14 of Figure 13.

Figure 15 is a perspective view of the spring core means which is built into the waste hose, and which on a smaller scale, is also built into the smaller supply hose.

By way of introduction to the following detailed description, I deem it significant to say that an important aspect of the overall invention has to do with a bedside flush-type bedpan construction which is characterized by portable supporting means and a raisable and lowerable bowl carried by said supporting means. The bottom of the bowl is substantially flat, free of obstructions and
depressions on its interior and is provided with a discharge opening through which flush water and waste matter empties. It is further provided with a water receiving, circulating and distributing channel which is distinct in that it is provided with water-issuing ports located in a predetermined manner to aim and direct all water jets issuing from said ports toward and through the discharge opening in such a manner that the cross-cutting and splashing of water streams in the main stream portion of the bowl is prevented. Extensible and retractable conduit means is connected with and delivers water under pressure to the stated channel and, in addition, extensible and retractable conduit means is also connected with the discharge opening in a manner to properly empty the bowl.

Attention is first directed to Figure 1 wherein it will be seen that the mobile or portable support or base is denoted by the numeral 17. This comprises a horizontal tubular base frame 18 provided with appropriate casters 19 and reinforced by a cross member 20. Attached to and arising from one end portion of the base frame are spaced parallel tubular uprights 21 and connected to these in spaced parallel relation above the frame 18 is an elevated similarly shaped frame 22. Vertical connecting members 23 serve to connect the two frames 18 and 22 together and the frame 22 has a cross brace 24. Reference being had to Figure 5, I call attention to perpendicularly disposed channel-like guides 25 connected as at 26 and 27 to said frames 18 and 22. These are provided with outstanding arms 28 (see Figures 1 and 10), which arms terminate in hooks 29 whereby to provide suitable racking means for an optionally usable conventional-type toilet seat 30. The toilet seat is provided with attaching members 31 (see Figures 5 and 6) which project into the respective channels and these are provided with guiding and keying rollers 32. The rollers run up and down in channelways and permit the seat to normally take an out-of-the-way vertical position as shown in full lines in Figure 5 or to assume a horizontally usable position as shown in dotted lines in the same figure. The numeral 33 merely designates cushioning or bumper springs in the lower end portions of the guides which assist in conveniently dropping the toilet seat down to take the out-of-the-way position shown.

The improved bowl is denoted, as a unitary device, by the numeral 34, the same being of appropriate size and materials. The bowl proper is ovate or egg-shaped in top plan view as shown in Figure 1, is relatively shallow on the inner or left hand side and has an outwardly and downwardly inclined bottom 35 which channels the flush water and fecal matter for convenient drainage through the discharge opening 36 and its associated nipple 37. Said bowl is provided with an endless flush water receiving, circulating and distributing rim 38 (see Figure 4) water being fed into same by way of the short neck or nipple 39 and is provided with a plurality of properly spaced circumferentially arranged water jetting nipples 40. These nipples are angularly positioned in relation to the entire internal surfaces of the bowl and also in relation to the discharge opening 36. Thus, the nipples are equally spaced and coordinate in a manner that all jets forcibly spouting therefrom are individually aimed to concentrate and merge for election through said discharge opening, this in such a manner that none of said jets intermingle or cross each other until they reach the area in the immediate vicinity of the discharge opening, whereby to thus prevent the user from being splashed and sprayed, while, at the same time serving to effectively scavenge, scour and cleanse the flushed surface of said bowl. This flush rim and nipple arrangement is of cardinal importance since the bowl must of necessity be shallow but nevertheless sufficient to be self-cleansing and such that swirling water currents will be reduced to a minimum to avoid needless splashing of the user.

As shown in Figure 4 the top or cover portion of the bowl, denoted at 41 is of the shape shown in Figure 2. It has an opening 42, this of general oval shape, said opening being denoted by an internally stopped ledge 43. A ring-like frame 44 is fastened to the ledge means (see Figure 9) and serves to accommodate a mount 45 for the patient seating annulus 46. The annulus has its inner peripheral edge depressed and shaped as at 47 to comfortably seat the patient. At one end is an upstanding anti-splash shield 48. The annulus is hingedly mounted on one side as at 49 to permit same to be swung open when one desires to urinate into the bowl from a standing position. An appropriate detent or latch 50 is provided opposite the hinge and this snaps down into appropriate keeper means to keep the annulus closed. A hand grip is provided at 51 (see Figure 9) to facilitate opening and closing the annulus in kid-like fashion, also for turning the annulus around through a half-circle in relation to the pan proper. This makes it possible to use the bowl in a pan between beds and to swing the seat annulus 46 around so that the shield is either on the left or right side as the case may be. The top also includes a portion, adjacent the discharge which constitutes an overhanging hood 52 and further includes adapter extensions 53 which are properly arranged and aperture 54 to slidably mount the bowl on the aforementioned upright 21 as shown in Figure 1. Thus, the bowl may be lowered to the dotted line position where it sits on the frame 22 for use as a regular toilet; or, may be elevated to the full line position over the mattress 55 when employed as a bedpan as it has already been pointed out, the seat 30 and the rack may be employed in conjunction with the seating annulus 46, or not. The seat 30 is usable only when the bowl is in a down or toilet height position on the frame 22. If instead of using the nipples 40 one prefers it, said nipples may be dispensed with and ports or apertures 54 may be provided in the flushing rim as shown in Figure 4a. In this modification, however, the apertures 54 take the same angular relationship and positioned as the nipples 40 seen in Figure 4. A further modification of the flushing rim is seen in Figure 12 wherein instead of the annulus of Figure 4, I provide an accurate or elongated slot 55 of general horseshoe-shaped formation. In this arrangement supplemental nipples 56 are used in conjunction therewith and are properly angled and aimed toward the discharge opening.

As shown in Figure 5 a relatively small flexible hose line, of appropriate length is attached to the neck 39 for purposes of supplying water, under pressure, to the bowl. This is connected to and forms a part of a special dual hose unit 58 which unit, generally speaking, is flexible and extensible and contractible. Said unit also includes a larger hose (to be later detailed) and this is for disposal of waste matter and is operatively connected at its intake and with the neck 31. At its discharge end it is connected with a suit-
ably mounted trap 60 which, shown in the drawings, is mounted on the floor and attached to a waste or soil pipe 51. Placing the trap on the floor, if desired, the floor is a highly important feature of the invention and obviates the necessity of having a trap built into the bowl itself. It is to be pointed out, however, that the trap 60 is here purely illustrative and may, as a matter of fact, be a part of a regular wall or floor mounted trap 60 which, shown in the drawings, is mounted on the floor and attached to a waste or soil pipe 51. In other words, the discharge end of the larger hose may be connected by way of said toilet to the soil pipe. A highly flexible hose line 62 affords a connection between the unit 58 and a water supply pipe 63. Said water supply pipe is attached to and depends from an appropriate remote control flush valve 64 mounted on the wall or any other part of the room. The flush valve is conventional and is not shown in detail, but under all conditions will be installed at an elevation higher than any ordinary hospital bed to comply with plumbing regulations. The controlling lever 65 thereof is operated by a pull cord 66 which is trained through a plurality of guide eyes 67, suitably arranged and then passed through an appropriate guide 68 on top of the bowl where it terminates in a finger ring 70 conveniently located to be grasped and pulled by the user. Thus, by pulling the cord 66 flush water is fed through the valve 64, down through the pipe 63, through the hose 62 and through the special double conduit means 58 into the small hose then into the bowl, or rather the flush rim of said bowl. A small pilot pipe 71 connects with the flush water pipe 63 and also connects as at 72 with the trap for additionally supplying water into the trap to facilitate the operation of the trap and also to insure the presence therein, at all times, of an effective water seal. The presence of this extra water supply pilot pipe 71 is highly advantageous as it insures effective operation of the trap. The extensible and contractible conduit means, embodying separate but coacting hose lines, is shown to advantage in Figure 13, wherein it will be seen that the larger hose 13 has a built-in spring core for extension and retraction purposes. The inner lining is smooth and highly elastic as at 74. The smaller hose 75 is also extensible and retractable and is provided with a built-in spring core assembly. The employment of an outside bellows-like wrapping 76 serves to bind the hose 73 and 75 together and allows for ready lengthening and shortening, as is obvious. The rings forming part of the core means (for each hose) are denoted by the numerals 71 and are connected together by expanding and contracting springs 78. When the bowl is down the conduit means 58 automatically contracts and shortens and when the bowl is up said conduit means extends its length to accommodate the elevated position of said bowl. I do not desire to be restricted to the precise construction of the conduit means described above nor desire to cover the idea of flexible trailing hose means between the bowl and trap and flush valve supply which has the flexible and self accommodating properties herein covered.

In Figure 11, instead of using a stand or base of the type described, I use of a simple uniform base 79 with casters 80, said platform carrying an appropriate riser 81 with an inclined top portion 82 constituting an appropriate seat for the bowl. Here the bowl simply sits on the riser when used as a toilet and when employed as a bedpan is bodily lifted from the base and carried by hand and placed over the mattress M of the bed, in an obvious manner. The purpose here is to eliminate a direct mechanical connection of the toilet and base or supporting means.

Reference being had to Figure 4, it will be noted that I provide a boss or mound 83 and situate same across the mouth of the discharge 38 and this functions primarily as a dam, whereby the toilet or hospital bed pan forms a small and shallow pool 84. The latter, in turn, wets the bowl sufficiently that sticking of adhesive waste material is virtually eliminated. What is more, since said dam bridges the discharge 38 and is beneath the hood 52, it contributes to the effectiveness of the concentrating and funnelling pocket to baffle and "swish-swash" the entrapped mass into forceful whirlpool, thus disintegrating lumps into readily dischargeable particles. However the turbulent action is free from any tendency to "backlash" into the basin proper. In a side discharging shallow bowl such a non-clogging result is manifestly desirable, to say the least.

Before taking up other features and advantages of the invention, I call attention to Figure 7, for it is believed that, in addition to the over-all advantages already described, the novel arrangement in the figure 7 has to do with the aforementioned flush rim construction characterized by the three distinguishable groups of jets with the latter categorized as main and auxiliary. It is felt that I have evolved and produced a unique flush pan of the kind here shown in Figure 7, with or without the lidding cover shown in Figure 4. Or, to put it more specifically, novelty is, obviously, predicated upon the pans of Figure 7 which, as mentioned, is substantially ovate in top plan and is integrated with the flush rim and is comparatively shallow and has a bottom which slants from the left to the right and deepens the righthand end of the pan. More particularly, the left-hand transverse end of the pan, sometimes called the inner end when the device is used as a bedpan, is denoted by the numeral 85 and the dialmetrically opposite or outer transverse end portion is denoted at 86. Now, since this pan in its lengthwise direction reaches over the top of the bed mattress, as shown in the drawings in Figure 1, and the patient lays across the pan, the edge portion of the rim identified at 87 may be referred to as the rearward flush rim reach or portion while the opposed and corresponding part of the rim denoted at 88 may be said to be the front reach or side of said flush rim.

The transverse end portion 85 defines an arc and in this arc are the radial discharge passages or nipples 40. Looking at Figure 7, and again at Figure 8, I call attention to the fact that all of these nozzles or nipples 40 have their orifices so located that the water jets issue against the surface 39 (Figures 1, 4, 7 and 8) which forms a side of a cone in Figure 7, with or without aiming or pointing these nipples into the basin portion, they shoot their streams against the splash-board 89. The jets intermingle and form a spread sheet which flushes or sweeps down the curvate surface of the pan and the number of nipples in this latter made up of those denoted at 40, determines the width of the main central-ized outgoing stream A. The currents of this stream converge and rush out through the unobstructed discharge opening 35. The collateral side streams denoted at B and C in Figure 7 are not, of course, definitely isolated as the drawings infer. In practice these side streams hug
the curvate contours of the side portions of the pan, somewhat as diagrammatically illustrated. To assist in imaginatively delineating the three streams A, B and C, the nipples which deliver streams B and C are denoted by the numerals 90 and 91. That is to say, the nipples on the rearward longitudinal side of the flush rim are denoted at 90 and 91, and those on the other or forward side are denoted by the numerals 92.

The relative positions of the opposed nipples in these two groups or batteries are approximately the same. That is to say, all of these nipples 90 and 91 are at different angles in respect to each other, while the nipples 40, but are directed so that the issuing jets impinge or strike against the longitudinal side walls and the streams flow parallel to the contours thus existing. Primarily, however, the orifices of these nipples are aimed toward the discharge opening so that the streams are essentially projected toward the discharge opening 38. The main idea, however, is to note that the nipples 90 and 91 do not shoot crosswise into the currents which go to make up the somewhat V-shaped main stream A. This stream A follows the contour of the pan and does the principal flushing work. The other two streams B and C primarily scavenges and cleans the surfaces of the pan, particularly beneath the longitudinal side portions of the flush rim. By preventing cross crossing of the several streams and thus harmonizing same, there is no likelihood that the occupant of the pan will be inconvenienced or uncomfortably splashed.

It is further to be added that the discharge portions of the respective streams A, B and C merge and come together at the narrow discharge end of the bowl but where this turbulent converging is initiated, the resultant swirl of water is confined beneath the anti-splash hood 82. Thus, I emphasize that there is absolutely no splashing of water in the uncovered basin portion of the bedpan.

It is a matter of common knowledge that the use of bedpans in hospitals is one of the many of objections met by doctors, nurses and attendants, and yet facilities have not, as yet, been provided, to my knowledge, whereby the attendants can be geared to handle the situations with the requisite sense of proportion and nicety. The vital functions of patients, especially those who are convalescing by a sense of agitation or embarrassment, are elementary factors, but are nevertheless highly important to all concerned to avoid the inconveniences suffered by those who meet and try to cope with them. I have considered the part of wisdom to openly approach this subject of somewhat singular silence which is, apparently, a non-controversial subject due to the disturbed attitudes of all who are confronted by it. Thus, I have evolved a portable water closet which can be moved from place to place in a room, shoved beneath the bed when not in use, placed alongside the bed or elsewhere in the room when desired for use as a regular toilet, as seen in Figure 1, or shifted around and brought into place and employed as an elevated toilet or so-called flush-type "bedpan" when employed in the position also illustrated in Figure 1 of the drawings.

Considering the anxieties of the patients and the serenity which attends a convertible, portable, multi-purpose toilet of this type, I believe that it is of incalculable service. However, it is not the purpose of the present patent application to dwell upon commercial aspects or to cover the obvious needs and purposes of a structure of this character.

My carriage-supported dual purpose water closet will aptly fulfill the general requirements of a long needed bedside toilet and/or bedpan in an obvious and acceptable manner. It can be readily wheeled about and carted from place to place, shoved beneath the bed or into a closet to be out of the way, can be maneuvered and employed between beds, utilized alongside the bed, and what is more important, can be wheeled into position near the bed, after which the patient can swing and bring it into use and thereafter push it out of the way, as conditions require.

In other words, due to the mobility of the carriage and the flexible accommodation possibilities of the hose connections, it lends itself admirably well to serve the patient and relieve nurses and attendants of what would otherwise be endless and disconcerting chores.

It is to be recalled, at this stage, that although the trap is shown as mounted on the floor and above the level of the floor, it is within the purview of the invention to install the trap below the floor. And, as to the flush valve structure, this is, as a general rule, mounted on a vertical wall and is situated in an elevation that it is well above the level of the hospital bed. Hospital beds are higher than ordinary beds but it will be my purpose to make sure that the flush valve is on a plane above the highest types of beds. The depending rigid pipe will serve to reach down close to the floor in order to best accommodate the hose means. The bowl is intended to be readily applicable and removable and, in being detachable, it lends itself to convenient cleansing and sterilization. The small and large hose may be separate and bound together by a wrapping or casing as shown, or under certain conditions may be integrated and formed into a flexible unit with independent passages.

I desire to stress that phase of the invention which I consider to be an innovation, that is, the ready availability of the device in that it can be moved toward and from the bed at the proper elevation, swung over the bed and used, then swung out of the way and shifted to a place where it will be positioned when not needed for use.

Changes in shape, size, materials and rearrangement of details and parts may be resorted to in actual practice, so long as they do not depart from the spirit of the invention or the scope of the appended claims, as is well understood.

Having described the invention, what is claimed as new is:

1. In a flush-type bed-toilet construction of the class described, supporting means, a raisable and lowerable flush pan, said pan being provided with a marginal discharge opening for effluent passage of faecal matter and flush water, said pan being further provided with an internal water receiving, circulating and pan-flushing rim, said rim having flush water issuing ports located to concentrate each and all water jets toward said discharge opening, a relatively small conduit directly connected with and for supplying water under flushing pressure to said rim, said conduit being of elongated flexible form and adapted to be connected at its intake end with a flush valve equipped pipe line independent of and remote from said flush pan, a second relatively larger conduit operatively connected at its
intake to said discharge opening, trap means also independent of and remote from said pan and adapted for connection with a waste pipe, said second conduit said flexible and connected at its outlet end with said trap means, and means for supporting said flush pan attached to said supporting means, said pan being thereby permitted, through the collective functions of said means, to be readily raised and positioned, as a bedpan, over a bed or lowered, fixedly supported, and used in the latter position as a regular toilet.

2. In a flush-type toilet of the class described, in combination, a trap positioned adjacent the floor level adapted to be connected with a waste pipe of a conventional type, a remote controlled flush valve adapted to be communicatively connected with a conventional source of water supply, said flush valve being provided with a vertically depending supply pipe terminating on a plane adjacent the floor lever, a portable flush-type bedpan, an elongated flexible supply hose connected at one end with said bedpan, said hose being connected at its opposite end with the lower end of said supply pipe, a relatively larger hose, said bedpan having a discharge opening, said latter hose being connected with said discharge opening at one end and being connected, at its opposite end, with said trap, said flush valve being independent of said bedpan and disposed on a plane well above the highest usable position of said bedpan.

3. As a new article of manufacture, a commode bowl for use in a flush-type toilet of the class described comprising a relatively shallow bowl having a discharge opening to accommodate a hose adapted to lead to a soil pipe, also having an intake opening adapted to accommodate a hose leading from a source of water supply, the top of said bowl being provided with removable seating means including an upstanding shield and said means being rotatably mounted to dispose the shield at such location as is desired according to varying requirements of use.

4. As a new article of manufacture and as a component part of the structure of the class described, a relatively shallow commode bowl having seat means and also including a water receiving and circulating interiorly disposed rim, said rim being provided with jet feeding nipples, all of said nipples being coordinated and situated and radially and angularly directed so that the water jets issuing therefrom will be concentrated and directed toward one focal point, said bowl at said focal point being provided with a hooded discharge opening, whereby the water jets are directed toward said hooded discharge opening and at the same time, are forcibly directed toward and against all internal surfaces of the bowl to insure proper cleansing of said internal surfaces while, at the same time minimizing, if not preventing, cross currents or intermingling jets of water until about to be expelled beneath said hood by way of said discharge opening.

5. A portable flush-type bedpan comprising a relatively shallow flushable pan having a bottom, top, and marginal side walls, one side wall having an unobstructed discharge opening for waste water and fecal matter, said top having an imperforate portion overhanging said discharge opening and defining a waste concentrating pocket and an anti-splash hood, said top also embodying a flush water receiving, circulating and distributing flush rim, said bottom being free of obstructions, interiorly smooth and gradually inclining toward said discharge opening and progressively increasing the depth of said rim, said rim having circumferentially distributed flush water passages, all of which are precision located and definitely aimed, and angularly pitched in respect to the adjacent coacting interior surfaces of said bottom and side walls and hood so that criss-crossing a jetting of jets, in the main basin portion of the pan, is prevented, a conduit connected with said flush rim and adapted to deliver water, under flushing pressure, from a source to said flush rim, and a second conduit connected at its intake end to said discharge opening and adapted for connection, at its opposite end, to a trap-equipped soil pipe.

6. A portable flush-type bedpan comprising a relatively shallow flushable pan, and having a bottom, top, and marginal side walls, one side wall having a freely open discharge opening for waste water and fecal matter, said top having an imperforate portion overhanging said discharge opening and defining a waste concentrating and disintegrating pocket and an anti-splash hood, said top also embodying a flush water receiving, circulating and distributing flush rim, said bottom being substantially free of obstructions, interiorly smooth and inclining toward said discharge opening and gradually increasing the depth of the adjacent pocket, said rim having circumferentially distributed flush water passages, all of which are located at predetermined points and precisely aimed and angled in respect to each other and the complementsal interior surface of said bottom and side walls so that each water jet is distinctly focused, except within the confines of said pocket, so that criss-crossing and splashing of jets, in the main basin portion of the pan, is virtually eliminated, a remote controlled flush valve adapted to be fixedly supported and connected to a water supply pipe, a flexible water supply hose connected at one end with said rim and at its opposite end with said flush valve, a flexible manually operable trip element connected with said flush valve and having its operating end mounted for use on said bedpan, a stationary trap also remote from said pan, and a flexible waste disposal hose connected at one end with said trap and at its opposite end with the discharge opening.

7. As a new article of manufacture, a comparatively shallow ovate bedpan having a dished bottom, an intumet overhanging annular flush rim and, being narrowed at one end and provided at said one end with an unobstructed discharge opening approximately in a plane with the adjacent floor portion of said bedpan, said flush rim having circumferentially distributed flush water passages; there being three distinguishable batteries of passages; namely, a main battery of passages distributively located at the end of the flush rim opposite to said narrow end, and two auxiliary batteries of passages, the latter confined respectively to the longitudinal forward and rearward side portions of said flush rim, the discharge orifices of the passages constituting said main battery being directed outwardly and away from said discharge opening and also focused to cause the issuing jets to impinge against the immediately coacting interior surfaces beneath said flush rim, and the orifices of the passages constituting said auxiliary batteries being angularly directed and focused to cause the issuing jets to impinge against and to
follow the contoured surfaces leading directly toward said discharge opening, whereby to delineate and forcibly deliver three distinct outgoing water streams, a main centralised stream and two collateral side streams, to said discharge opening, said streams being sufficiently isolated one from the other to prevent turbulent criss-crossing of said streams and ensuring complete flushing and scavenging of said bed to a predetermined low level and used as a regular toilet. 11. A flush-type bedpan comprising a comparatively shallow oval pan including a bottom with an surrounding marginal transverse end walls and longitudinal forward and rearward walls, the upper edge portions of said walls embodying an inward oval flush rim overhanging the basin portion of said pan, one transverse end portion of the pan being deepened and narrowed and the corresponding wall having a discharge opening situated in a plane with said bottom, the flush rim at the opposite transverse end of said pan having a battery of flush water issuing nipples, each nipple at a radial angle different from the others, the discharge orifices of said nipples being angled in directions outwardly and away from said basin and said discharge opening and thus aimed to focus the distinictly pitched water jets against the complemental wall, whereby the jets are baffled and then combine into a distibutively spread stream which sweeps down the co-acting end wall and rushes straight ahead, wholly devoid of turbulous cross currents, through the basin and funnels into and through said discharge opening.

10. A convertible bedside toilet of the type shown and described comprising a portable support, a perpendicularly razingly movable flush-type bedpan adjustable mounted on and carried by said support, said bedpan having a flush rim, an elongated flexible water delivery hose connected at one end with said flush rim and adapted to deliver water, under pressure, to said flush rim, a remote control valve adapted to be fixedly connected in communicating relation with a water supply pipe, said delivery hose being connected at its opposite end with said flush valve, a flexible element connected at one end with said flush valve for operating latter, and having its opposite end provided with an operating member mounted on said bedpan for convenience of actuation by the occupant of the bedpan, said bedpan having a discharge opening, a second elongated flexible hose connected at its intake end with said discharge opening, a stationary trap, said second-named hose being connected with said trap, said trap being at a point remote from said bedpan, said hoses being of substantial lengths to permit the support and bedpan to be freely shifted about from place to place in the room and employed for use at selected points of vantage and permitting said bedpan to be elevated on the support for use at bed height as well as lowered on said support to a predetermined low level and used as a regular toilet.

11. A flush-type bedpan comprising a relatively shallow pan having a bottom, top, and marginal side walls, one side wall having a discharge opening for waste water and said bedpan, said top having an imperforate portion overhanging said discharge opening and defining a fluid concentrating pocket and an anti-splash hood, said top also embodying a flush water receiving, circulating and distributing flush rim, said bottom being substantially flat, interiorly smooth, free of permanent obstructions and gradually inclining toward said discharge opening and gradually enlarging said pocket, said flush rim having circumferentially distributed flush water passages each of which is precision located and angularly aimed toward the adjacent side wall and away from the center of said bedpan whereby criss-crossing and swirling of outgoing jets, in the main central portion of the bedpan, is prevented, said bottom being provided, in close proximity to said discharge opening, with a boss and said boss coacting with the adjacent inclined portion of the pan bottom in providing a sum total of retaining a part of after-flush water and to pool same in the pan.

12. A multiple purpose flushable bedpan of the class shown and described comprising a toilet high base, a bedpan resting removably on said base and adapted to be optionally used, while resting firmly on said base, as a bedside toilet, said bedpan being bodily liftable from said base and adapted to rest on a bed mattress and thus used as a conventional bedpan, said bedpan having a water receiving, circulating and distributing flush rim provided with passages for flushing the bed pan, having a hooded portion on one side with an underlying discharge opening, a water supply conduit connected at one end with said flush rim, a discharge conduit connected with said discharge opening, remote controlled water supply means including a flush valve with an operating element for the flush valve attached to and operable from said bedpan, said flush valve being situated fixedly on a plane above the highest usable plane of said bedpan, and a stationary trap also remote from said pan, said discharge conduit being connected at its opposite end with said trap.

13. A multiple purpose bedpan construction comprising, in combination, a soil pipe having a trap communicatively attached thereto, a water supply pipe, a flush valve communicatively connected with said water supply pipe and located on a plane above the trap, a relatively shallow flushable bedpan provided at its top with a flush water receiving, circulating and distributing flush rim, said bedpan having a hooded portion on one side, and a coacting underlying discharge opening, an elongated flexible water supply hose connected at one end with said flush rim and connected at its opposite end with said flush valve, said flush valve being arranged at a height above floor level to occupy a plane higher than the highest usable plane of said bedpan, manually controlled flush valve operating means mounted on said bedpan and connected with said flush valve for remotely controlling the latter, and a second elongated flexible hose connected with said discharge opening at one end and also connected, at its opposite end, with said trap, and a portable support, said bedpan being adjustable mounted on said support and usable, when in a relatively low position, as a regular toilet, and when in an elevated position as a bedpan, whereby said bedpan has the double purpose of providing a flushable bedpan as well as a regular standard height toilet.
14. A flush-type pan construction comprising supporting means, a raisable and lowerable pan on said supporting means, said pan being provided with a discharge opening for effluent passage of waste matter and flush water, said pan being further provided with a water-receiving, circulating and distributing channel adjacent the walls of the pan, said channel having flush-water passages connected therewith positioned at predetermined points and at predetermined angles in respect to each other and the adjacent interior surface of the pan to produce a smooth non-splashing flow of water in the main portion of said pan, whereby crisscrossing and splashing of water streams in the main portion of the pan is prevented while producing water streams directed toward said discharge opening, said pan being movably connected with conduit means for delivering water under flushing pressure to said channel and conduit means movably connected with said discharge opening for the passage there-through of waste matter and flush water discharged from said pan.

15. A flush-type pan having a discharge opening for waste water and waste matter, a water-receiving, circulating and distributing channel adjacent the walls of said pan, said channel having flush-water passages connected therewith positioned at predetermined points and at predetermined angles in respect to each other and the adjacent interior surface of the pan to produce a smooth non-splashing flow of water in the main portion of the pan, whereby crisscrossing and splashing of water streams in the main portion of the pan is prevented while producing water streams directed toward said discharge opening.

16. A portable bedside toilet comprising a stationary trap, a stationary flush valve, a portable toilet movable toward and from said trap and valve respectively and having discharge means for effluent waste matter and flush water and further having a flush water receiving, circulating and distributing channel, extensible and retractable conduit means permitting selective positioning of the toilet and affording communicative connection between the trap and discharge means respectively, and the flush valve and channel respectively, said flush valve being positioned in a horizontal plane above the horizontal plane of said toilet, and remote control means for said flush valve for convenient accessible use by the occupant of said toilet.

17. The structure set forth in claim 16, including a manually rollable stand for said toilet, the latter being vertically adjustable on said stand and being in the form of a bedpan.

ISADORE LEVIN.

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