March 31, 1959 W. F. MUELLER 2,879,519

WATER CLOSET

Filed March 7, 1956 5 Sheets-Sheet 1

FIG 1

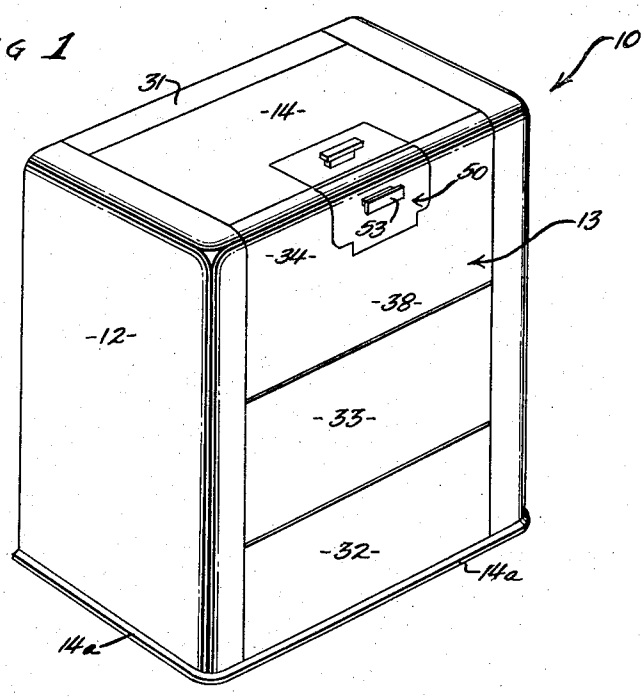
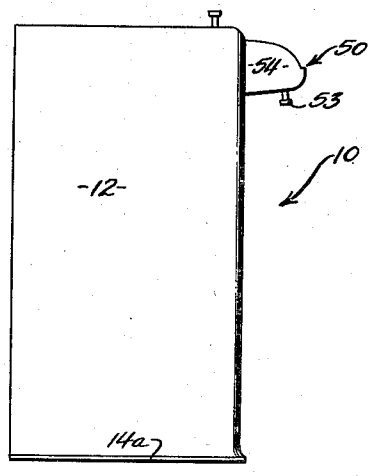


FIG. 2



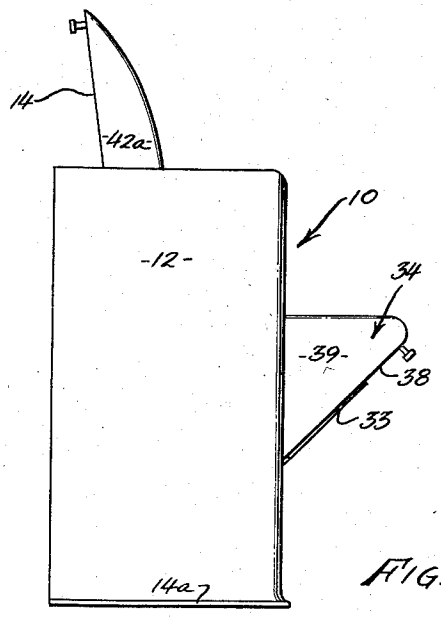


FIG. 3

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WATER CLOSET

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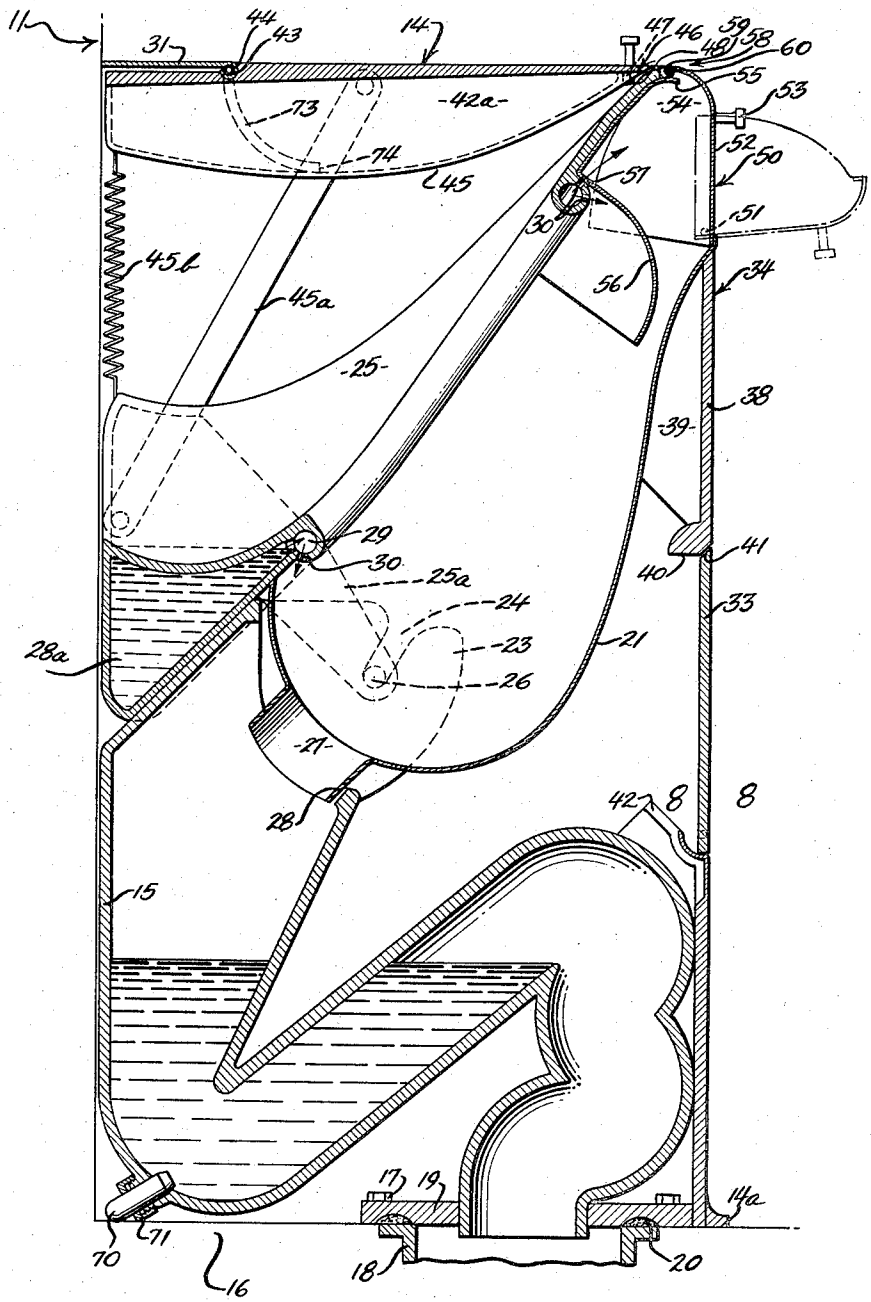


FIG. 4

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WATER CLOSET

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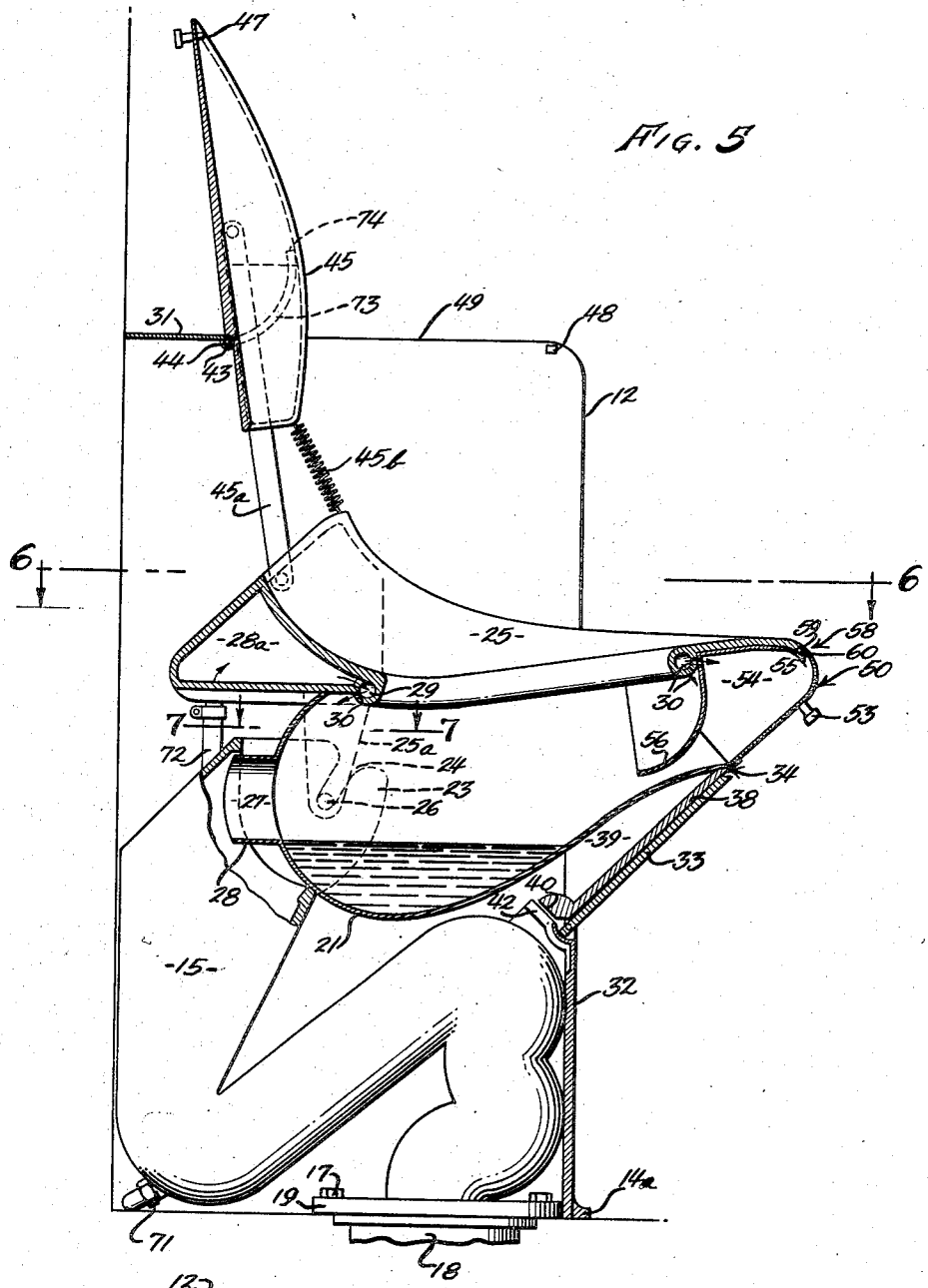


FIG. 5

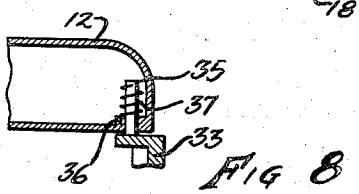


FIG 8

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WATER CLOSET

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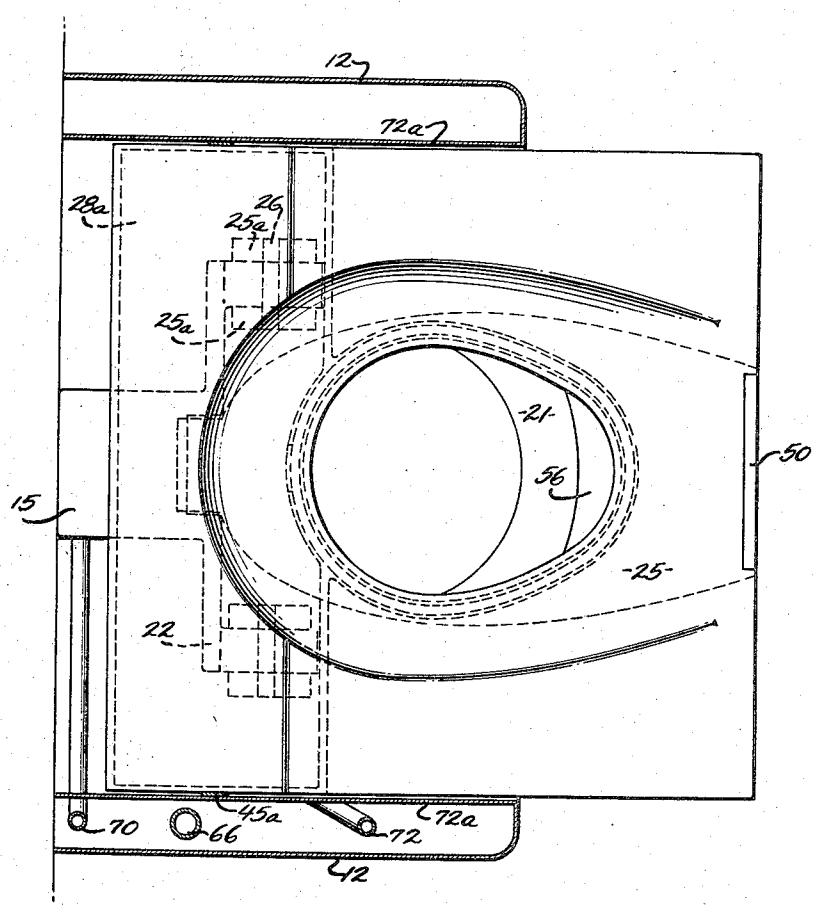


FIG. 6

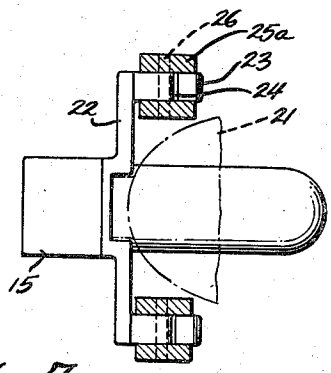


FIG. 7

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WATER CLOSET

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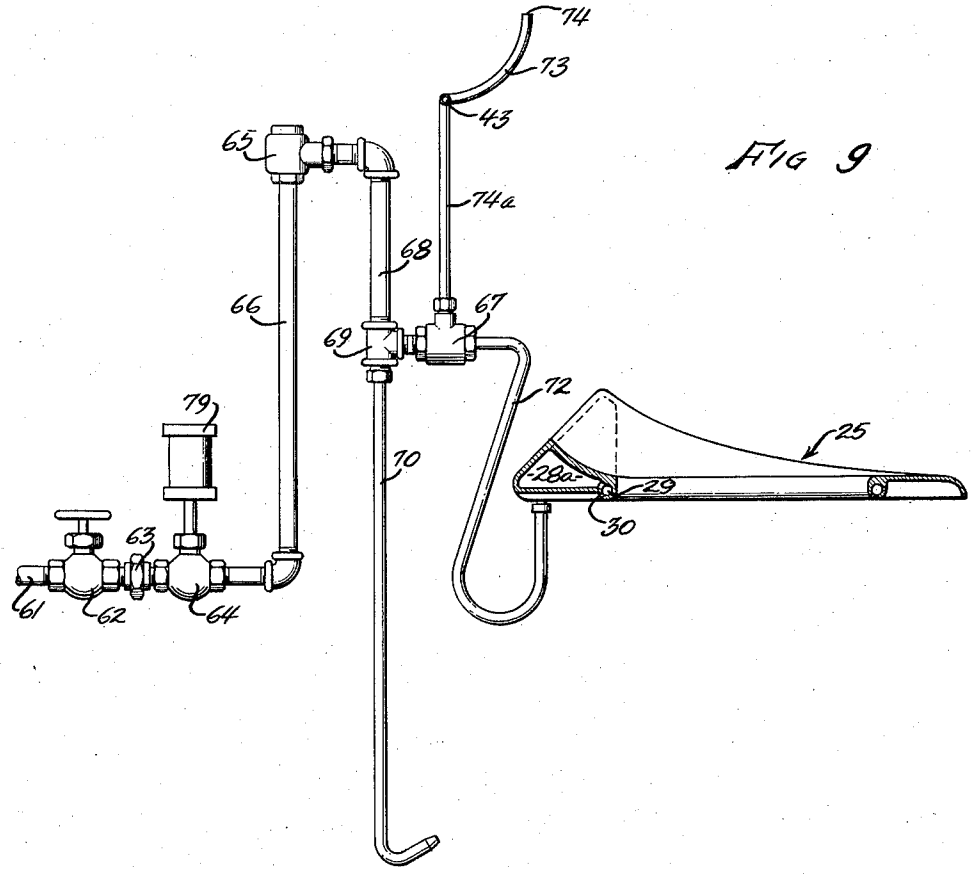
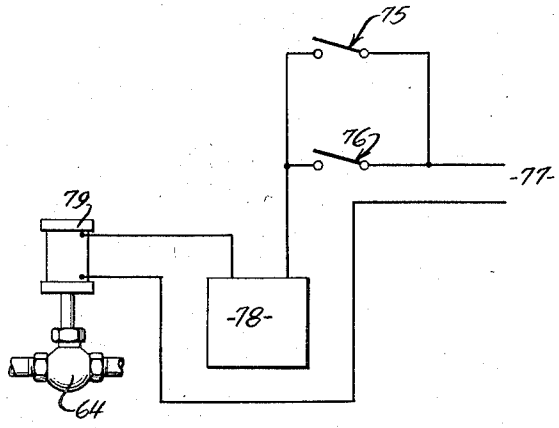


FIG 9

FIG 10



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United States Patent Office 2,879,519 Patented Mar. 31, 1959

2,879,519

WATER CLOSET

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Application March 7, 1956, Serial No. 570,065

8 Claims. (Cl. 4—10)

The present invention relates to a toilet or water closet.

While many features of the present residential toilet have been improved and modernized, the apparatus is still distinguishable by its customary design and mode of operation. For instance, even the most modern water closet of the type presently in use utilizes a flush tank which is positioned to the rear of the bowl and conventional flush mechanism operated by a handle for releasing the water in the flush tank for flushing the bowl. The bowl is in almost every instance in the form of a pedestal which encloses and incorporates a water trap. While much effort and energy has been directed toward modernizing and improving other appliances found in the home, such as for example, kitchen appliances, not only to improve their operation and utility but to make these devices more pleasing in appearance, nothing has been accomplished toward improving the operation or utility of a water closet nor toward making a water closet more pleasing in design. The commercial water closet of the type generally in use differs from the residential water closet only in that it does not have a flush box and associated flush mechanism but instead incorporates a suitable metering valve which is manually activated. A closet of this type however is dependent upon a one inch water inlet which in most instances is larger than the inlet used for residential buildings.

The present invention contemplates a water closet which is a great departure in design and operation from the conventional type presently in use. The water closet of the present invention eliminates the flush tank and the manually operated mechanism for effecting operation of the water closet. The water closet of the present invention further is completely enclosed when not in use, and the bowl is swingable from an upwardly inclined position, to a horizontal operative position and the flushing mechanism of the closet is automatically responsive to the position of the bowl. When the closet of the present invention is in its closed non-use position, the overall area of the closet is roughly ⅓ to ½ that of the conventional water closet, or in other words, the closet of the present invention when in its non-use position will take up roughly ⅓ to ½ the space required for the conventional closet. Also, when the closet is in its non-use position, it has the appearance of a cabinet so that the bathroom can be made to look as inviting and pleasing as any other room of the house. The closet of the present invention further incorporates a "His" and "Her" position, and in each instance the mechanism is automatically self-flushing when the closet is returned to its non-use position. The bowl itself incorporates self-cleaning mechanism which is also automatically operative in a predetermined cycle. It will be appreciated, therefore, that the closet of the present invention is a radical departure from the water closet of the type presently in use in that among other things the flush tank and associated flush mechanism is eliminated, the bowl is self-cleaning, the bowl is swingable from its enclosed upwardly extending discharge position to its horizontal use position, the bowl incorporates "Her" features and "His" features which are independent of each other, the apparatus is automatically self-flushing and the bowl is automatically self-cleaned, the bowl is dry when in its non-use position, and the closet when in its non-use position is completely

enclosed in a cabinet which comprises roughly ⅓ to ½ the space of the conventional water closet.

It is a principal object of the present invention therefore, to improve the operation and construction of devices of this type.

A further object of the present invention is to provide a water closet which is completely enclosed when in its non-use discharge position.

Another object of the present invention is to provide a water closet having "His" or "Her" characteristics.

A still further object of the present invention is to provide a toilet bowl having an enclosed spray system which is automatically operative for spraying the bowl.

A still further object of the present invention is to provide a toilet bowl having an automatic spray system in combination with a detergent system for automatically sanitizing the bowl when in non-use.

Yet another object of the present invention is to provide means for automatically filling the trap upon completion of the flushing operation and for automatically directing a predetermined amount of water into the bowl while at the same time wetting the sides of the bowl just prior to use.

A still further object of the present invention is to provide a water closet which is pleasing in design, which is simple in operation, which can be easily manufactured and which can be easily installed either as a replacement item or as original equipment.

To the accomplishment of the foregoing and related ends, said invention then comprises the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawings setting forth in detail certain illustrative embodiments of the invention, these being indicative, however, of but a few of the various ways in which the principles of the invention may be employed.

In the drawings:

Fig. 1 is a perspective view taken from the left front of a water closet embodying the principles of the present invention.

Fig. 2 is a side elevational view of the closet shown in Fig. 1, slightly reduced in size, showing the "His" position.

Fig. 3 is a view similar to Fig. 3 showing the "Her" position.

Fig. 4 is a vertical sectional view of the closet shown in Fig. 1, slightly enlarged and with parts removed, showing the "His" position in dotted lines.

Fig. 5 is a view similar to Fig. 4, reduced in size, showing the "Her" position.

Fig. 6 is a horizontal sectional view taken on the line 6—6 of Fig. 5.

Fig. 7 is a horizontal sectional view taken on the line 7—7 of Fig. 5, with parts removed.

Fig. 8 is a horizontal sectional view taken on the line 8—8 of Fig. 4, showing the pivotal connection of the middle panel of the front wall.

Fig. 9 is an elevational view of the piping and plumbing fixtures for interconnecting the closet of the present invention with the water source, with parts removed.

Fig. 10 is a diagrammatic plan view of the wiring circuit for interconnecting the closet of the present invention with a source of electrical energy.

Referring to Figs. 1 through 6 of the drawings, the water closet of the present invention when in its non-use position is in the form of a cabinet generally designated by the number **10** and which preferably extends from a room wall **11**, cabinet **10** having side walls **12**, a front wall **13**, and a top wall **14**, each of the side walls **12** and front wall **13** having a flange **14***a* for sealing the cabinet to the floor. In a typical instance, cabinet **10** measures 24 inches in width, 27 inches in height and 14¼ inches in depth,

assuming that the plumbing outlet or bell is at a 10 inch center from the wall 11. If the plumbing outlet or bell is at a 12 or 14 inch center from the wall 11, the depth of the cabinet will measure 16¼ inches or 18¼ respectively. It will be appreciated, therefore, that closet 10 is very compact and decorative when in its non-use position and does not have the appearance of the conventional water closet.

The functional mechanism of closet 10 comprises a base 15 which is preferably formed of cast iron porcelainized and which is in the form or nature of a trap or siphon. The base 15 is suitably fixed to the floor 16 by bolts or screws 17 or any other suitable means so as to enclose the inlet of a plumbing outlet or bell 18. To suitably seal the base or trap 15 with the plumbing outlet or bell 18, a sealing ring 19 of any suitable construction can be employed which encloses a sealing gasket 20 in a manner well known in the art.

The base 15 acts as a pedestal for swingably supporting a bowl 21, and a pair of standards 22, see also Fig. 7, extend from opposite sides of base 15 adjacent the inlet thereof to which are suitably fixed a pair of brackets 23. Each of these brackets 23 has an upwardly open saddle portion 24, and the bowl 21 has a seat 25, as will be more fully explained hereinafter, which has a pair of downwardly depending spaced arms 25*a* on the opposite sides thereof which carry adjacent their lower ends a suitable pin 26. The pin 26 of each pair of depending arms 25*a* is received in the saddle portion 24 of its supporting bracket 23 so that the bowl is carried by the brackets for up-and-down swinging movement. It will be appreciated, therefore, that the bowl is swingably supported by the base or trap 15 to move from an upwardly inclined discharge position relative to the inlet of base 15 to a substantially horizontal use position, and, as will be more fully appreciated hereinafter, the bowl can be easily removed from the pedestal by merely slipping out the pins 26 from their location in the saddle portions 24 of the brackets 23.

The bowl can be formed of any suitable material such as, for instance, vitreous china, enamelware, plastic or stainless steel, and a discharge opening 27, in the form of a pipe section 28, is provided in the rear of the bowl in discharge alignment with the inlet of the trap when the bowl is moved into its upwardly inclined non-use position. The seat 25 which is preferably contoured in configuration and formed of plastic is suitably fixed to the upper rim of the bowl so as to constitute an integral part therewith, and this seat has incorporated in its rearward portion a suitable water reservoir 28*a* which leads into a duct 29 which extends around the inner edge of the bowl and a plurality of distributing openings or slits 30 connecting the duct 29 with the inside of the bowl so that liquid in the reservoir can be directed through the duct and through the distributing openings 30 so as to spray and clean the inside of the bowl as will be more fully appreciated hereinafter.

The reservoir 28*a* is substantially triangular-shaped in cross-section and its interconnection with duct 29 so located that when the bowl 21 is in its upstanding non-use position, and assuming that the reservoir is full of water, substantially the upper half or level of the water in the reservoir 28*a* will empty by gravity into duct 29 and through distributing openings 30 into the bowl 21 wherein it will flow through discharge opening 27 into trap 15. And as will be more fully appreciated hereinafter, the reservoir is so shaped that the amount of water flowing into trap 15 when the bowl is in its non-use position is sufficient to fill the trap upon completion of the flushing operation. When the bowl 21 is in its substantially horizontal or use position, the remaining water in the reservoir 28*a* will flow by gravity through duct 29 and openings 30 into the bowl 21 so as to fill the bowl with a predetermined amount of water while at the same time wetting the sides of the bowl immediately prior to use.

Cabinet 10, as previously suggested, consists of two side walls 12, preferably formed of any suitable rigid material such as stainless steel, which are suitably secured adjacent their lower ends to opposite sides of the pedestal and are tied together adjacent their upper end by a rigid cross member 31. The side walls are also preferably sealed to the floor, as previously suggested, to facilitate cleaning around the closet. The front wall 13 consists of three panels, a bottom panel 32, a middle panel 33 and a top panel 34. The bottom panel 32 is suitably fixed to the pedestal 15 and to the side edges of each of the side walls 12 and preferably sealed to the floor as previously suggested. The middle panel 33 has a pair of pins 35, see Fig. 8, only one of which is shown, extending from the opposite sides thereof which are received in suitable bearings 36 fixed with the side walls 12 so as to be carried thereby for up-and-down swinging movement. Each of the pins 35 receives a coiled spring 37 which is fixed at its one end to its associated pin 35 and at its other end to its associated bearing 36 so that the middle panel is resiliently urged to move into a normal upstanding position. The top panel 34 is an extension of the front edge of the seat 25 in the form of a skirt or front face 38 which is fixed to the outer surface of the bowl 21. The skirt 38 also has side walls 39 which extend from the side edges of the front face 38 to the bowl 21 and to the seat 25 so that when the bowl 21 is in its horizontal or use position that portion of the bowl 21 which extends outwardly beyond the front edges of the sides wall 12 is completely enclosed by the skirt 38 and its side walls 39. When the closet is in its non-use closed position, the lower edge 40 of the skirt 38 overlaps the upper edge 41 of the middle panel 33 so that when the bowl 21 is moved into its use position, the middle panel 33 is urged to swing against the force exerted by the coil springs 37 outwardly and downwardly a distance sufficient to permit the lower edge 40 of the top panel to move into abutment with a stop 42 formed as a part of the base or pedestal 15. It will be appreciated, therefore, that the top panel 34 defines the horizontal use position of the bowl and in so doing urgs the middle panel 33 to swing into its out-of-the-way position by reason of its overlapping relationship with respect to skirt 38. The top wall 14 of the cabinet is in the form of a lid 42*a* which carries a pair of pins 43 which extend from its opposite sides, only one of which is shown. Each of pins 43 is rotatably received by a bearing 44 formed in the cross member 31 adjacent the opposite side walls 12 so that the lid 42*a* is swingably supported for up-and-down swinging movement. As will be more fully appreciated and explained hereinafter, the lid 42*a* is preferably formed of plastic and is of hollow construction and serves as a reservoir for a detergent solution. The inner wall 45 of the lid 42*a* is suitably contoured so that when the lid is in its raised position it will provide a comfortable back rest in combination with the contoured seat 25. The lid is link connected with the seat 25 of bowl 21 by a suitable rigid member 45*a*, and the bowl and the lid are suitably counterbalanced by a spring 45*b* so that the bowl will be urged to move into its horizontal use position upon the lid being swung upwardly into its back rest position. When the lid 42*a* is swung downwardly into its closed position, the bowl 21 will be urged to move into its upstanding non-use position and the middle panel 33 will be urged to move into its normal upstanding position upon face 38 of the top panel 34 being moved into its vertically disposed position. To retain the lid 42*a* in its closed position a magnetic latch 46 is provided which consists of a magnetic element 47 carried by the lid and a magnetically responsive element 48 carried by one of the side walls 12. It will also be appreciated, that when the bowl is in its horizontal use position, the top edge 49 of each of the side walls is at a height which provides convenient arm supports.

As previously suggested, the water closet of the present invention incorporates "His" characteristics as well as

"Her" characteristics. More specifically, the free end of the bowl is in the form of a urinal lid or trough **50** which is swingably connected by suitable pins **51**. This lid has a front face **52** which when in its closed position is substantially co-planar with the face **38** of the top panel **34** of the front wall **13** so that when the lid is closed, and when the closet is in its non-use closed position, the urinal lid does not present an obstruction to otherwise break up the front wall panel design except for a suitable handle **53**. The lid **50** also has a pair of side walls **54** so that the lid is in the form of a trough when moved into its open position. The under surface of the forward end of the seat **25** has formed therewith or affixed thereto a liner **55**, preferably formed of stainless steel or plastic, which has a downwardly and backwardly curved deflector **56** extending therefrom, and suitable distributing openings **57** are formed in the deflector **56** in alignment with the distributed openings **30** interconnected with the adjacent port **29** so that upon actuation of the spraying system, as will be fully explained hereinafter, the lid **50** will be washed and cleaned. For retaining the lid in its closed position, a suitable magnetic latch **58** is provided which includes a magnetic element **59** carried by the seat and a magnetically responsive element **60** carried by the lid.

Referring to Fig. 9, the water supply is directed into the closet by means of an inlet pipe **61**. The inlet pipe is connected to a suitable manually operative valve **62** which in turn is connected by a union **63** to one end of a solenoid operated normally closed valve **64**. The other end of the normally closed solenoid operated valve **64** is connected to the inlet of a right-angle anti-back siphon **65** by means of suitable piping **66**, the anti-back siphon **65** being located well above the bowl **21** and its seat **25** when the bowl is in its horizontal use position. The outlet end of the right-angle anti-back siphon **65** is connected to the inlet end of a straight-through anti-back siphon **67** by means of suitable piping **68**, this straight-through anti-back siphon **67** being located below the right-angle anti-back siphon **65**. It will be noted that piping **68** prior to its entry into the straight-through anti-back siphon **67** incorporates a T-section **69** so that only approximately ⅔ of the volume of water being directed through the piping **68** goes through the straight-through anti-back siphon **67** while approximately the other ⅓ of the volume of water is directed downwardly into the bottom of the trap **15** so as to act as a jet during flushing operations. This water is carried in piping **70** which is fixed in the trap by means of a suitable lock means **71**. The outlet end of the straight-through anti-back siphon **67** is connected by a flexible piping **72** with the reservoir **28***a* in the seat so that water will be directed through the duct **29** and openings **30** against the inner surface of the bowl **21** simultaneously with the trap flushing operation. It will be appreciated that the volume of water during the operation of the spray cycle directed into reservoir **28***a* is greater than the volume of water being directed out of the reservoir into duct **29** and through openings **30** so that the reservoir is filled during the spraying operation and the water is directed into duct **29** and through openings **30** under pressure.

Each of the side walls **12** has an inside panel **72***a* and a portion of piping **66**, anti-back siphon **65**, piping **68**, anti-back siphon **67**, and a portion of piping **70** and flexible piping **72** is located adjacent the inner face of one of the side walls and enclosed by its associated panel **72***a* so as not to be visible when the closet is moved into its "Her" position.

As previously suggested, the lid **42***a* is in the form of a reservoir for carrying a detergent solution. More specifically, a metering tube **73** is positioned in the reservoir with its open end **74** adjacent the lowest point. The outlet end of the tube **73** is connected with one of the pivot pins **43** which is tubular and which in turn is connected adjacent its other end by means of a suitable pipe **74***a* to the top of the anti-back siphon **67** so that when the top lid **42***a* is swung into its raised backrest position, the tube **73** will be filled with a predetermined amount of detergent solution which in turn will be directed into piping **74***a* and consequently into the anti-back siphon **67**. The level of the detergent solution in the top lid is maintained below the inlet **74** of the metering tube **73** when the lid is in its raised position so that only a predetermined amount of this solution can be directed into the anti-back siphon **67**.

As previously suggested, the spraying and flushing operations are automatically responsive to the position of the bowl **21** or to the position of the urinal lid **50**. More specifically, a microswitch **75** is associated with the urinal lid **50** so as to be in its open position upon the urinal lid being in its closed position, and a microswitch **76** is located on the stop **42** and is in its open position when the bowl **21** is in its non-use upstanding position. The microswitch **76** is connected to a source of electrical energy **77** in series with a timing relay **78** and a solenoid **79** of valve **64**, and the timing relay is such that on being actuated or regenerated it will energize the solenoid for a predetermined length of time, say for instance, 30 seconds. The switch **75** is connected to switch **76** in series so that switch **75** is a slave to master switch **76**.

In the operation of this device and assuming the closet to be in its closed position, the urinal lid **50** can be swung into its open trough-like position upon the operator pulling downwardly upon handle **53**. When the lid **50** is moved into its closed position, the switch **75** is moved into its open position and energizes the timer relay **78**, switch **76** being in its normally open position, which in turn energizes the solenoid **79**, and solenoid valve **64** is moved into its open position. The water is then directed through anti-back siphon **67** into the reservoir **28***a* of the seat **25** and tends to fill the reservoir which, as previously suggested, is substantially half full when the bowl is in its discharge position. After the reservoir has become completely full, the water is directed under pressure into the distributing duct **29** and through the outlet openings **30** against the inside surface of the bowl **21** and lid **50**. Simultaneously, water is being directed downwardly in piping **70** and into the trap in the form of a jet for flushing the trap. After a predetermined length of time, the timer relay **78** cuts off, the solenoid **79** is deenergized and the valve **64** returns to its normally closed position. The reservoir **28***a* in the seat **25** at this time is completely filled, and the anti-back stop **67** prevents any of the water from flowing backwardly through the piping **72**. Substantially half of the water in the reservoir, therefore, flows into the bowl **21** and consequently into the trap so as to fill the trap with a predetermined level of water in the manner as previously suggested so that in no instance is the trap ever left completely dry after the flushing operation.

When the bowl **21** is next moved into its horizontal use position, the remaining water in the reservoir **28***a* flows into the bowl so as to fill the bowl to a predetermined level. With the bowl **21** in its horizontal use position, the microswitch **76** is in its closed position, and immediately upon the bowl being raised from its use position, the microswitch **76** resumes its normally open position and again reactivates the timer relay **78** for a predetermined interval. Upon the bowl **21** assuming its discharge position, the contents of the bowl are discharged into the trap and the trap is flushed and the bowl is sprayed with a jet of water in the same manner as described with reference to the operation of the urinal lid **50** for a predetermined length of time. Upon completion of the spraying and flushing operation, or in other words, upon the solenoid **79** being de-energized, the upper level of the water in the seat reservoir **28***a* flows into the bowl and consequently into the trap so as to

again fill the trap with a predetermined amount of water. It will be appreciated that when the bowl is in its use position, that movement of the urinal lid from its open to its closed position cannot actuate the flushing and spray cycle inasmuch as the bowl microswitch **76** is in its closed position. It will also be appreciated that when the bowl is moved from its use to its discharge position, a metered amount of detergent solution will be directed into the anti-back siphon **67** which in turn will be mixed with the water being directed into the reservoir **28***a* so as to sanitize and clean the bowl during the spraying operation.

As previously stated, the middle panel **33** is swingable forwardly and downwardly. It will be appreciated, therefore, that access to the inside of the closet when the closet is in its closed position can be had upon swinging middle panel **33** into its open position.

What is claimed is:

1. A combination water closet and urinal comprising a bowl swingably supported to move from an upstanding discharge position to a substantially horizontal use position, the free end of said bowl being in the form of a swingable urinal trough opening into said bowl whereby said closet can be used as a urinal when said bowl is in its discharge position and said trough is in its open position.

2. A combination water closet and urinal comprising a trap, a bowl swingably supported to move from an upstanding discharge position relative to the inlet of said trap to a substantially horizontal use position, the free end of said bowl being in the form of a swingable urinal trough opening into said bowl whereby said closet can be used as a urinal when said bowl is in its discharge position and said trough is in its open position, and means automatically responsive to the position of said trough for directing a cleaning spray against the inside of said bowl upon said trough being moved to its closed position.

3. A combination water closet and urinal comprising a trap, a bowl swingably supported to move from an upstanding discharge position relative to the inlet of said trap to a substantially horizontal use position, the free end of said bowl being in the form of a swingable urinal trough, the face of which is substantially flush with the surrounding surface of said bowl, whereby said closet can be used as a urinal when said bowl is in its discharge position and said trough is in its open position, and means automatically responsive to the position of said trough for directing a spray of water against the inner wall of bowl, and into said trap for flushing said trap when said trough assumes its closed position.

4. A combination water closet and urinal comprising a trap, a bowl swingably supported to move from an upstanding discharge position relative to the inlet of said trap to a substantially horizontal use position, the free end of said bowl being in the form of a swingable urinal trough opening into said bowl whereby said closet can be used as a urinal when said bowl is in its discharge position and said trough is in its open position, means responsive to the position of said trough when said bowl is in its discharge position for automatically cleaning said bowl and flushing said trap upon said trough assuming its closed position, means for directing a predetermined amount of water into said bowl upon said bowl assuming its use position, and means responsive to the position of said bowl for automatically cleaning said bowl and flushing said trap upon said bowl assuming its discharge position.

5. A combination water closet and urinal comprising a trap, a bowl swingably supported to move from an upstanding discharge position relative to the inlet of said trap to a substantially horizontal use position, the free end of said bowl being in the form of a swingable urinal trough discharging into said inlet whereby said closet can be used as a urinal when said bowl is in its discharge position and said trough is in its open position, and a deflector carried by said bowl adjacent said lid.

6. A water closet comprising a trap, a bowl swingable from a dumping position relative to the inlet of said trap to a use position, a cabinet for enclosing said bowl and said trap when said bowl is in its dumping position including side walls, a top wall, and a front wall, said top wall being swingably supported by said side walls and connected with said bowl for urging said bowl to move into use position upon said top wall being swung upwardly, and said front wall consisting of one panel swingably connected for up and down movement and another panel fixed with said bowl adjacent the free end thereof and positioned in overlapping relationship with respect to said swingable panel whereby said swingable panel is urged to swing into an out-of-the-way position upon said bowl being moved into its use position, said top wall being in the form of a reservoir for carrying a disinfectant, and means for directing a metered amount of said disinfectant into said bowl upon said top wall being moved into its upstanding position.

7. A water closet comprising a trap, a bowl swingable from a dumping position relative to the inlet of said trap to a use position, a cabinet for enclosing said bowl and said trap when said bowl is in its dumping position including side walls, a top wall, and a front wall, said top wall being swingably supported by said side walls and connected with said bowl for urging said bowl to move into use position upon said top wall being swung upwardly, the free end of said bowl being in the form of a urinal trough opening into said bowl, and said front wall consisting of a plurality of panels, one of said panels being swingably connected for up and down swinging movement from its normal upstanding position, and another of said panels being fixed with said bowl adjacent the swinging connection of said trough whereby the bottom edge of the second mentioned panel is in substantially overlapping relationship with the top edge of the first mentioned panel whereby said trough can be opened and closed independently of said front wall and said first mentioned panel will swing into an out-of-the-way position sufficient to permit said bowl to swing into its use position.

8. A water closet comprising a bowl which is formed of two sections swingably interconnected, a trap, means for swingably connecting said bowl relative to said trap so that said bowl can move from a use position to a non-use dumping position relative to said trap, one of the swingable sections of said bowl being located adjacent the free end thereof and being in the form of a trough opening into the other section of said bowl for discharge into said trap, said bowl being in its Her position upon said trough being moved into its closed position and said bowl being in its use position and in its His position upon said bowl being in its non-use position and said trough being in its open position, means for automatically flushing said bowl upon movement of said trough into its closed position when said bowl is in its non-use position or upon movement of said bowl into its non-use position frm its use position and for flushing said trap substantially empty, and means for automatically directing a predetermined volume of water into said trap after flushing operation.

References Cited in the file of this patent

UNITED STATES PATENTS

269,648	Edinger	Dec. 26, 1882
1,495,540	Van Sant	May 27, 1924
1,675,263	Flagg	June 26, 1928
2,495,498	Allard	Jan. 24, 1950
2,611,134	Jarrett	Sept. 23, 1952
2,725,575	Colonna	Dec. 6, 1955
2,794,988	Colonna	June 11, 1957