

Feb. 13, 1962

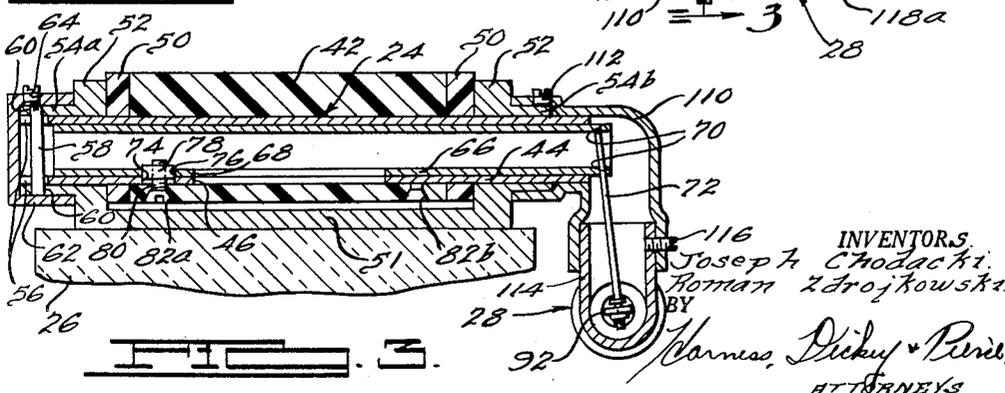
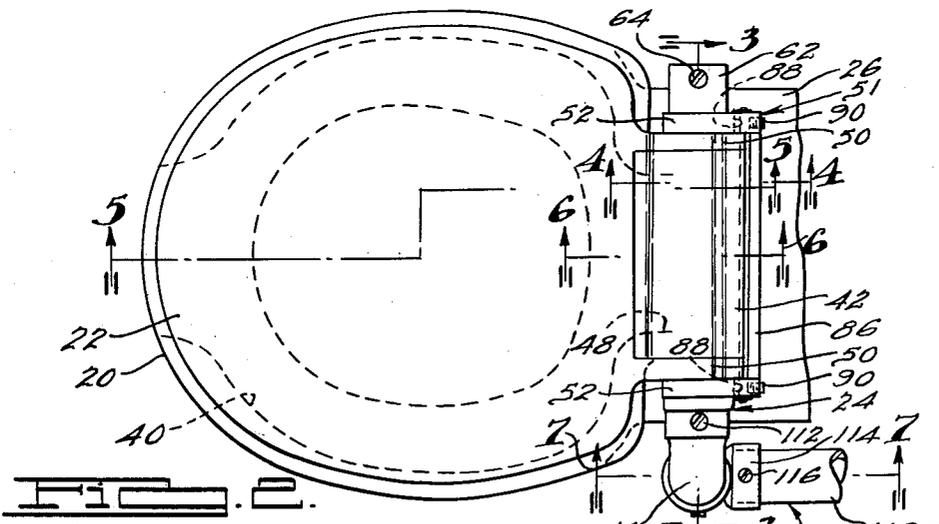
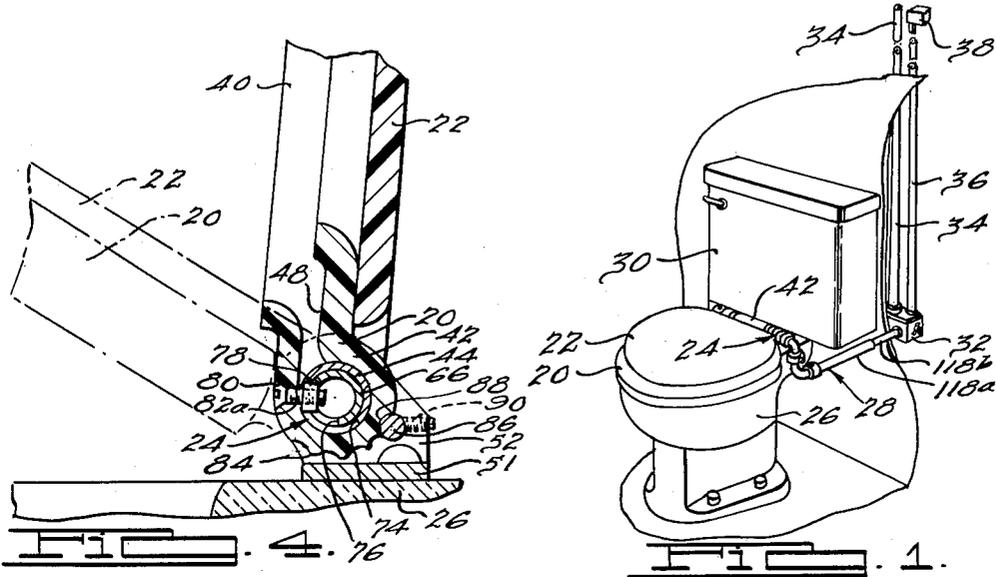
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3,020,564

TOILET VENTILATION SYSTEM

Filed June 6, 1961

2 Sheets-Sheet 1



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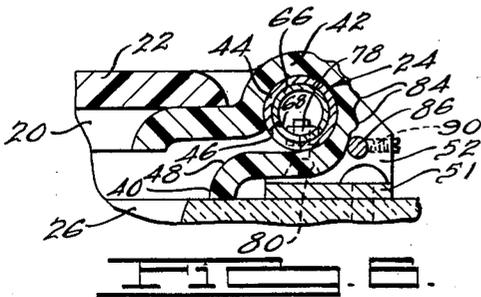
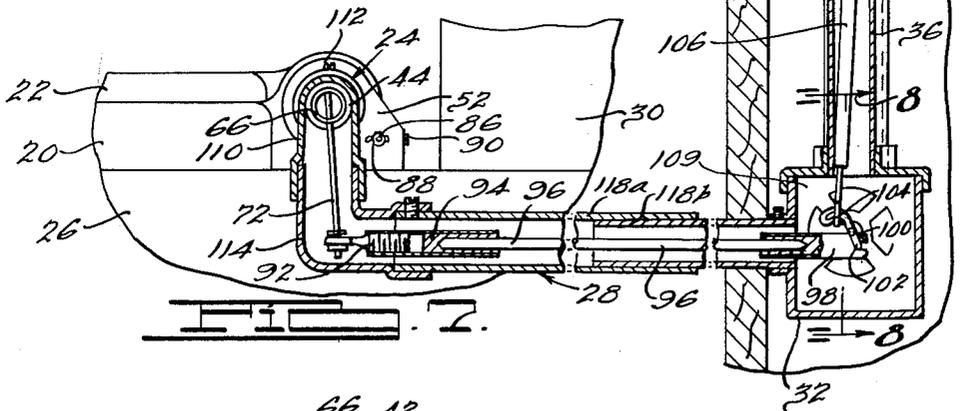
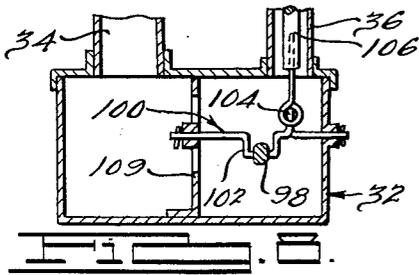
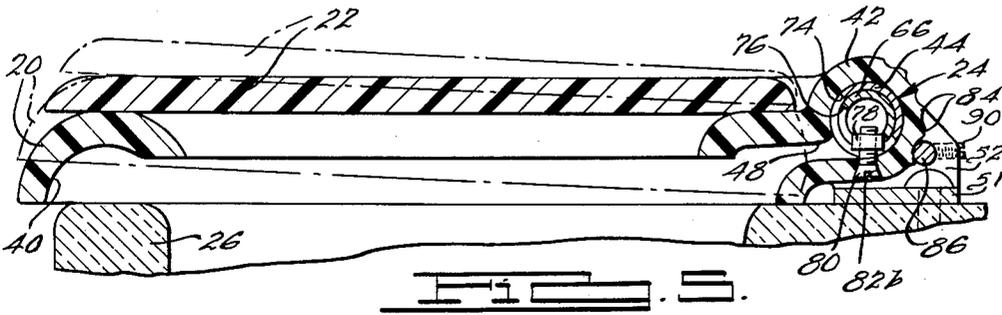
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3,020,564

TOILET VENTILATION SYSTEM

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2 Sheets-Sheet 2



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3,020,564

TOILET VENTILATION SYSTEM

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5 Claims. (Cl. 4—213)

The present invention broadly relates to lavatory ventilating systems and more particularly to an improved automatically operable ventilating assembly for use on conventional toilet bowls.

It is a primary object of the present invention to provide an improved ventilating toilet seat system that can be readily installed on conventional toilet bowls and which provides forced draft ventilation of the interior of the bowl and the lavatory.

Another object of the present invention is to provide an improved toilet bowl ventilating system which is automatically operable only when the seat is occupied.

Still another object of the present invention is to provide an improved toilet ventilating system incorporating therein a tubular hinge assembly having ventilating apertures therethrough which are disposed in communication with an exhaust system only when the seat is in the lowered position.

A further object of the present invention is to provide an improved toilet ventilating assembly incorporating a tubular hinge assembly having actuating means thereon for mechanically actuating a remotely disposed electrical switching means for energizing the exhaust system to avoid any hazard of electrical shock to the occupant.

A still further object of the present invention is to provide an improved toilet ventilating system which is of simple design, durable and automatic operation, of simple installation and maintenance, and of economical manufacture.

Other objects and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings, wherein:

FIGURE 1 is a perspective view of the toilet bowl incorporating thereon a ventilating assembly constructed in accordance with the preferred embodiments of the present invention and including a sectional view of the lavatory wall to illustrate the exhaust conduit means and electrical switching means connected to the ventilation system;

FIG. 2 is an enlarged fragmentary plan view of the ventilating toilet seat assembly shown in FIGURE 1;

FIG. 3 is a transverse vertical sectional view through the tubular hinge assembly of the toilet seat ventilating assembly shown in FIG. 2 and taken along the line 3—3 thereof;

FIG. 4 is a transverse sectional view through the tubular hinge assembly shown in FIG. 2 and taken along the line 4—4 thereof and illustrating the toilet seat in the raised position;

FIG. 5 is a vertical longitudinal sectional view through the ventilating toilet seat assembly shown in FIG. 2 and taken along substantially line 5—5 thereof;

FIG. 6 is a fragmentary transverse vertical sectional

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view through the tubular hinge assembly shown in FIG. 2 and taken along the line 6—6 thereof;

FIG. 7 is a fragmentary vertical sectional view taken through the exhaust conduit line shown in FIG. 2 and taken along line 7—7 thereof and including a vertical sectional view through the switch actuating means and exhaust conduits disposed in the wall behind the toilet bowl assembly; and

FIG. 8 is a transverse vertical sectional view of a junction box shown in FIG. 7 and taken along the line 8—8 thereof.

Referring now in detail to the drawings and as may be best seen in FIGURE 1, a toilet ventilating system constructed in accordance with the preferred embodiments of the present invention, comprises an oval shaped seat 20 and a seat cover 22 pivotally connected to a tubular hinge assembly 24 detachably mounted on the rear portion of a conventional toilet bowl 26. An exhaust conduit system 28 is connected to one end of the tubular hinge assembly 24 and extends rearwardly therefrom beneath a supply tank 30 of the toilet bowl assembly and through the lavatory wall. The exhaust conduit system 28 is slidably connected to a junction box 32 having an exhaust or vent stack 34 connected thereto through which the ventilating exhausted air is drawn and discharged to the atmosphere. The vent stack 34 preferably extends upwardly within the wall of the lavatory and can be connected to the suction side of a suitable electrically driven exhaust fan (not shown) from which the air and odors are discharged through the roof or side wall of the building. The junction box 32 is also provided with a protective shield tube 36 extending upwardly therefrom adjacent to the vent stack 34 to a point below an electrical actuator switch 38 which is adapted to be tripped when the seat 20 is moved to the fully lowered position thereby energizing the exhaust fan.

The toilet seat 20 as shown in FIGS. 2 through 6 is provided with a channel or recess 40 on the underside thereof which preferably slants upwardly toward the tubular hinge assembly 24 to facilitate evacuation of air from the interior of the toilet bowl 26. The peripheral edge of the toilet seat 20 is adapted to snugly overlie the upper surface of the bowl 26 along the side portions and rear portions thereof as shown in FIGS. 3 and 5. The front portion of the toilet seat 20 projects slightly beyond the forward edge of the toilet bowl 26 as shown in FIG. 5 providing an air inlet therebetween to the interior of the bowl. The rear portion of the toilet seat 20 is provided with a cylindrical or tubular mounting portion 42 integrally affixed thereto and adapted to receive a tubular sleeve 44 which is slidably disposed within the tubular mounting portion 42 and projects beyond the end edges thereof. The tubular sleeve 44 is provided with a rectangular shaped vent aperture 46 therethrough which, when the seat is disposed in the fully lowered position as shown in FIG. 6 is disposed in communication with a throat portion 48 extending inwardly of the tubular mounting portion 42 and disposed in communication with the recess 40 on the underside of the seat 20. The seat cover 22 is provided with a pair of rearwardly extending eyes 50 which are integrally secured to the seat cover and which are slidably and rotatably disposed around the periphery of the tubular sleeve 44. The seat 20 and the seat cover 22 can be

made of any suitable material and preferably is of a molded or cast plastic material.

The tubular hinge assembly 24 on which the seat 20 and seat cover 22 are pivotally mounted, is comprised of the tubular sleeve 44 which is supported by a mounting bracket 51 having a pair of transversely spaced upstanding bearing lugs 52 rigidly affixed to the base portion thereof and which bracket 50 is removably secured to the rear portion of the toilet bowl 26. Each of the bearing lugs 52 is provided with a tubular bearing sleeve 54a, 54b affixed to the outer sides thereof and which are disposed in substantial axial alignment with respect to each other. The tubular bearing sleeves 54a, 54b have an internal diameter corresponding to the outside diameter of the tubular sleeve 44 for slidably receiving and removably supporting each of the ends of the tubular sleeve 44. The left end of the tubular sleeve 44 as viewed in FIG. 3, is provided with a pair of diametrically disposed longitudinal notches 56 in which a pin 58 is disposed and which is retained by a pair of apertures 60 diametrically disposed through the tubular bearing sleeves 54a as shown in FIG. 3. The coaction between the pin 58 and the notches 56 at the end of the tubular sleeve 44 prevents relative rotation thereof with respect to the tubular bearing sleeves 54a, 54b. A cylindrical cap 62 is disposed in overlying sliding relationship around the tubular bearing sleeve 54a for contacting the ends of the pin 58 projecting through the apertures 60 and the cap 62 is removably restrained thereon by means of a set screw 64. The right end of the tubular sleeve 44 terminates as viewed in FIG. 3, at a point slightly beyond the projecting end of the tubular bearing sleeve 54b on the other side of the mounting bracket 51.

By virtue of the construction of the tubular hinge assembly 24, the seat 20 and seat cover 22 are free to pivot on the periphery of the tubular sleeve 44 which is stationarily restrained from rotation in the tubular bearing sleeves 54a, 54b, by the coaction of the stop pin 58. Slidably disposed within the tubular sleeve 44 is an inner tubular sleeve 66 which is provided with a rectangular venting aperture 68 which is adapted to be aligned with the venting aperture 46 as shown in FIG. 6 when the seat 20 is in the fully lowered position. The inner sleeve 66 as is best shown in FIG. 3, projects beyond the terminal portion of the tubular sleeve 44 on the right end as viewed in FIG. 3 and is provided with a pair of angularly inclined apertures 70 through which a lever arm 72 extends for actuating the electrical switch 38 as will subsequently be described.

The tubular sleeve 44 and inner sleeve 66 are provided with arcuate slots 74 and 76 respectively, which are alignable longitudinally with respect to each other and in which a nut 74 disposed in threaded engagement on a screw 80, is slidably disposed against the side edges thereof. The screw 80 as shown in FIGS. 3 to 6 extends through an aperture 82a in the tubular mounting portion 42 of the seat 20 and rotates relative to the tubular sleeve 44 in accordance with the pivoting movement of the seat.

As shown in FIG. 3, an alternate aperture 82b is provided on the right hand side of the tubular mounting portion 42 as viewed in FIG. 3 in which the screw 20 can be placed to reverse the ends of the tubular hinge assembly 24 whereby the exhaust conduit system 28 can be placed either on the right end or left end thereof consistent with the specific lavatory arrangement.

When the seat 20 is in the fully raised position as shown in FIG. 4, the throat 48 of the recess 40 is rotated out of communication with the vent aperture 46 in the tubular sleeve 44 preventing entry of any extraneous materials into the interior of the tubular hinge assembly when the seat is in the raised position. When the seat is in the fully raised position, the nut 78 is disposed against one end of the arcuate slot 74 in the tubular sleeve 44 serving as a stop and preventing further rearward tilting movement of the seat 20. When the seat is pivoted to its fully

lowered position as shown in solid lines in FIG. 5, the nut 78 engages the opposite end edge of the arcuate slot 76 in the inner sleeve 66 causing it to pivot in a counterclockwise direction as viewed in FIG. 5 whereby the lever arm 72 as shown in FIG. 7 is also caused to move in a counterclockwise direction effecting actuation of the switch 38 in a manner subsequently to be described.

The seat 20 as shown in phantom in FIG. 5 is disposed in a rest or an inoperative position wherein it is slightly inclined and raised upwardly from the upper edge of the bowl 26. The seat 20 is resiliently maintained in the rest or inoperative position and in other tilted positions spaced upwardly therefrom by means of the coaction between a series of longitudinal projections 84 extending longitudinally along the rearward arcuate surface of the tubular mounting portion 42 as shown in FIG. 5, and a cylindrical spring rod 86 extending between the upstanding bearing lugs 52 of the mounting bracket 51. The ends of the spring rod 86 are supported in a pair of elongated apertures 88 as is best seen in FIG. 4 and are adjustably biased against the rear surface of the tubular mounting portion 42 provided with the projections 84 therealong by means of set screws 90 threadably engaged in the bearing lugs 52 and having the shank end portions thereof disposed in abutting relationship against the side of the spring rod 86. Accordingly, the seat is resiliently maintained in a series of angular positions ranging from the upright position as shown in FIG. 4 to the inoperative angular rest position shown in phantom in FIG. 5 in accordance with the positioning of the projections 84 along the tubular mounting portion 42.

When in the inoperative position as shown in phantom in FIG. 5, the nut 78 enables slight clockwise rotation of the inner sleeve 66 whereby the lever arm 72 moves in a clockwise direction as viewed in FIG. 7 whereby the linkage system connected to the lever arm 72 is in the inoperative position and the electrical switch 38 is not actuated. Movement of the seat from the rest or inoperative position shown in phantom in FIG. 5 to the fully lowered or operative position as shown in solid lines causes the nut 78 to engage the end edge of the arcuate slot 76 in the inner sleeve 66 causing it to rotate in a counterclockwise direction moving the lever arm 72 in a corresponding counterclockwise direction and which movement is transmitted through a linkage system hereinafter to be described for actuating the electrical switch 38.

The linkage system connected to the end of the lever arm 72 as is best seen in FIGS. 3, 7 and 8 comprises a screw link 92 having an eye at one end thereof through which the lever arm 72 extends and is pivotally connected therethrough. The other threaded shank end portion of the screw link 92 is threadably engaged and disposed in one end of a connecting member 94 which is provided with a socket in the other end thereof in which the end of a push rod 96 is seated for transmitting the actuating force of the lever arm 72 to a second connecting member 98 at the other end thereof in which the other end of the push rod is seated. As shown in FIG. 7, the ends of the push rod 96 are provided with chamfered end edges forming a chisel point which is adapted to engage the surfaces of the correspondingly shaped sockets in each of the connecting members 94, 98 to prevent relative rotation between the connecting member 94 and the screw link 92. By virtue of the threaded shank portion of the screw link 92, the length of the linkage assembly between the end of the lever arm 72 and a crankshaft 100 to which the other connecting member 98 is connected is adjustable to achieve the desired length. As hereinbefore stated, rotation between the connecting member 94 and the screw link 92 is prevented to avoid loss of appropriate adjustment by virtue of the chisel end configuration of the push rod 96 seated in the sockets of the connecting members 94 and 98. In order to rotate the connecting member 94 relative to the threaded shank portion of the screw link 92, it is necessary to slightly withdraw the push rod 96

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from the connecting member 94 to disengage the chisel end of the push rod from the connecting member 94.

The crank 100 as is best shown in FIG. 8, is rotatably mounted in the junction box 32 and the bifurcated end of the connecting member 98 is disposed in engagement with a first offset portion 102 thereon imparting a rotary movement to the crank on actuation of the lever arm 72. A second offset portion 104 of the crank 100 is connected to an insulated flexible member 106 which is made of a suitable nonconductive material to prevent conduction of electricity from the electrical switch 38 to the exhaust conduit system 28. The ends of the flexible member 106 are provided with suitable engaging hooks for removably engaging the second offset portion 104 at one end and an upwardly resiliently biased actuating plunger 108 of the electrical switch 38. As shown in FIGS. 7 and 8, the crank 100 is rotatably journaled at one end on an intervening perforated partition 109 in the junction box 32 or can extend completely across and be rotatably journaled at its end in each of the end walls of the junction box.

By virtue of the linkage arrangement shown, the upward resilient biased movement of the actuating plunger 108 of the electric switch 38, causes the crank 100 to rotate in a clockwise direction as viewed in FIG. 7, whereby the connecting member 98, the push rod 96, the connecting member 94 and the screw link 92 are resiliently biased toward the left as viewed in FIG. 7 whereby the actuating lever arm 72 is moved in a clockwise direction to the off position. When the seat is moved from the rest position shown in phantom in FIG. 5 to the fully lowered position as shown in solid lines, the actuating lever 92 moves in a counterclockwise direction as hereinbefore described wherein a pushing movement is transmitted through the linkage system causing the crank arm 100 to rotate in a counterclockwise direction whereby the second offset portion 102 pulls the insulated flexible member 106 downwardly which in turn withdraws the actuating plunger 108 in opposition to its resilient biasing force causing the switch to be actuated which in turn energizes the exhaust fan.

The entire linkage system is enclosed within the exhaust conduit system 28 which comprises a tubular elbow 110 which is slidably disposed over the tubular bearing sleeve 54b as shown in FIG. 3 and removably secured thereon by a set screw 112. A second elbow 114 is slidably disposed within the lower end of the tubular elbow 110 and removably secured thereto by a second set screw 116. A telescoping conduit supply pipe comprising a first section 118a having its forward end adjustably secured to the second elbow 114 and a second section 118b slidably and telescopically disposed within the first section 118a is removably secured at its other end to the inlet of the junction box 32 as shown in FIG. 7. By virtue of the telescoping relationship between conduit supply sections 118a, 118b, the conduit supply system will readily accommodate variations between the spacing of the toilet bowl 26 with respect to the wall of the lavatory in which the junction box 32 is mounted.

The conduit supply sections 118a, 118b are snugly and slidably disposed at their overlapping sections to minimize entry of outside air at their connection during operation of the exhaust fan. The conduit supply sections can also be readily telescoped merely by loosening either of the set screws at their connection to the junction box 32 at one end and the second elbow 114 at the other end to gain ready access to the linkage system enclosed therein so as to enable appropriate adjustment of the connecting member 94 relative to the screw link 92.

On actuation of the electric switch 38 and the exhaust fan controlled thereby, air is drawn from the interior of the bowl 26 through the channel or recess 40 on the underside of the seat 20 and thence through the throat portion 43 and through the venting apertures 46 in the tubular sleeve 44 and venting aperture 68 through the in-

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ner sleeve 66 to the interior of the tubular hinge assembly 24. From there the air is drawn through the inner sleeve 66 through the elbows 110 and 114 and through the supply sections 118a, 118b into the junction box 32. The air thereafter passes from one compartment of junction box 32 through the perforated intermediate partition 109 thereof and from there upwardly through the vent stack 34 into the inlet side of the exhaust fan. The discharge of the air from the exhaust fan as hereinbefore set forth can be achieved either through the wall or roof of the building.

It will be apparent from the foregoing that by virtue of the disassemblable construction of the toilet ventilating system comprising the present invention, a high degree of flexibility and versatility of installation are provided to adapt the system to any one specific installation. The interchangeability of the tubular hinge assembly 24 enables connection of the exhaust conduit system 28 on either the right end or left end of the tubular hinge assembly as viewed in FIG. 3. In addition, the telescoping movement of the conduit supply pipe sections 118a, 118b and the adjustable feature provided between the push rod 96 and connecting member 94 and screw link 92, provides for simple adjustment of the assembly and appropriate automatic actuation thereof in response to the movement of the seat from the rest position to the fully lowered position. As soon as the seat is released, it is pivoted from the lowered position back to the rest position, in accordance with the biasing force of the cylindrical spring rod 86 and the biasing force of the resiliently biased actuating plunger 108 of the electric switch 38 restores the seat and the operating linkage to the off position.

While it will be apparent that the embodiments of the invention herein disclosed are well calculated to fulfill the objects of the invention, it will be appreciated that the invention is susceptible to modification, variation and change without departing from the proper scope or fair meaning of the subjoined claims.

What is claimed is:

1. In a lavatory ventilation system for use on toilet bowls, the combination comprising a tubular hinge assembly detachably secured to the rear portion of a toilet bowl and including a rotatably fixed tubular outer sleeve having a venting aperture therethrough, an oval shaped toilet seat including a tubular mounting portion at the rear portion thereof disposed in overlying sliding relationship around said outer sleeve providing for pivoting movement of said seat to and from a lowered position and a raised position, said seat adapted to snugly overlie a portion of said bowl when in said lowered position, and having a recess in the underside thereof, said mounting portion having a throat therethrough disposed in communication with said recess and said venting aperture in said outer sleeve when said seat is in said lowered position and out of communication with said venting aperture when said seat is in said raised position, resilient means coacting with said tubular hinge assembly and said seat for resiliently biasing said seat in a rest position angularly spaced from said lowered position, a seat cover pivotally mounted on said outer sleeve, a tubular inner sleeve slidably disposed within said outer sleeve and having a venting port therethrough adapted to be disposed in communication with said venting aperture and said throat when said seat is in said lowered position, a remotely disposed exhaust fan, a remotely disposed switching means for energizing said exhaust fan, conduit means connecting one end of said inner sleeve to said exhaust fan, an actuating lever mounted on said one end of said inner sleeve and disposed in said conduit means, coacting means on said tubular mounting portion for rotating said inner sleeve and said lever thereon when said seat is moved from said rest position to said lowered position as when occupied, and means connecting said actuating lever to said switching means for energizing said fan when said seat is moved from said rest position to said lowered position.

2. In a lavatory ventilation system for use on toilet bowls, the combination comprising a tubular hinge assembly detachably secured to the rear portion of a toilet bowl and including a rotatably fixed tubular outer sleeve having a venting aperture therethrough, an oval shaped toilet seat including a tubular mounting portion at the rear portion thereof disposed in overlying sliding relationship around said outer sleeve providing for pivoting movement of said seat to and from a lowered position and a raised position, said seat adapted to snugly overlie a portion of said bowl when in said lowered position, and having a recess in the underside thereof, said mounting portion having a throat therethrough disposed in communication with said recess and said venting aperture in said outer sleeve when said seat is in said lowered position and out of communication with said venting aperture when said seat is in said raised position, a series of projections extending longitudinally along the rear periphery of said mounting portion, a spring rod supported on said tubular hinge assembly and disposed in resilient contact with said projections for resiliently biasing said seat in a rest position angularly spaced from said lowered position, a seat cover pivotally mounted on said outer sleeve, a tubular inner sleeve slidably disposed within said outer sleeve and having a venting port therethrough adapted to be disposed in communication with said venting aperture and said throat when said seat is in said lowered position, a remotely disposed exhaust fan, a remotely disposed switching means for energizing said exhaust fan, conduit means connecting one end of said inner sleeve to said exhaust fan, an actuating lever mounted on said one end of said inner sleeve and disposed in said conduit means, coacting means on said tubular mounting portion for rotating said inner sleeve and said lever thereon when said seat is moved from said rest position to said lowered position as when occupied, and means connecting said actuating lever to said switching means for energizing said fan when said seat is moved from said rest position to said lowered position.

3. In a lavatory ventilation system for use on toilet bowls, the combination comprising a tubular hinge assembly detachably secured to the rear portion of a toilet bowl and including a rotatably fixed tubular outer sleeve having a venting aperture therethrough, an oval shaped toilet seat including a tubular mounting portion at the rear portion thereof disposed in overlying sliding relationship around said outer sleeve providing for pivoting movement of said seat to and from a lowered position and a raised position, said seat adapted to snugly overlie a portion of said bowl when in said lowered position, and having a recess in the underside thereof, said mounting portion having a throat therethrough disposed in communication with said recess and said venting aperture in said outer sleeve when said seat is in said lowered position and out of communication with said venting aperture when said seat is in said raised position, resilient means coacting with said tubular hinge assembly and said seat for resiliently biasing said seat in a rest position angularly spaced from said lowered position, a seat cover pivotally mounted on said outer sleeve, a tubular inner sleeve slidably disposed within said outer sleeve and having a venting port therethrough adapted to be disposed in communication with said venting aperture and said throat when said seat is in said lowered position, a remotely disposed exhaust fan, a remotely disposed switching means for energizing said exhaust fan, conduit means connecting one end of said inner sleeve to said exhaust fan, an actuating lever mounted on said one end of said inner sleeve and disposed in said conduit means, said outer and said inner sleeve provided with longitudinally aligned arcuated slots therethrough, an inwardly extending actuator on said tubular mounting portion disposed in said arcuate slots for engaging and rotating said inner sleeve and said lever thereon when said seat is moved from said

rest position to said lowered position as when occupied, and means connecting said actuating lever to said switching means for energizing said fan when said seat is moved from said rest position to said lowered position.

4. In a lavatory ventilation system for use on toilet bowls, the combination comprising a tubular hinge assembly detachably secured to the rear portion of a toilet bowl and including a rotatably fixed tubular outer sleeve having a venting aperture therethrough, an oval shaped toilet seat including a tubular mounting portion at the rear portion thereof disposed in overlying sliding relationship around said outer sleeve providing for pivoting movement of said seat to and from a lowered position and a raised position, said seat adapted to snugly overlie a portion of said bowl when in said lowered position, and having a recess in the underside thereof, said mounting portion having a throat therethrough disposed in communication with said recess and said venting aperture in said outer sleeve when said seat is in said lowered position and out of communication with said venting aperture when said seat is in said raised position, resilient means coacting with said tubular hinge assembly and said seat for resiliently biasing said seat in a rest position angularly spaced from said lowered position, a seat cover pivotally mounted on said outer sleeve, a tubular inner sleeve slidably disposed within said outer sleeve and having a venting port therethrough adapted to be disposed in communication with said venting aperture and said throat when said seat is in said lowered position, a remotely disposed exhaust fan, a remotely disposed switching means for energizing said exhaust fan, conduit means connecting one end of said inner sleeve to said exhaust fan, an actuating lever mounted on said one end of said inner sleeve and disposed in said conduit means, coacting means on said tubular mounting portion for rotating said inner sleeve and said lever thereon to and from an inoperative position when said seat is disposed in said rest position and an operative position when said seat is disposed in said lowered position as when occupied, adjustable linkage means extending through said conduit means for connecting said actuating lever to said switching means for energizing said fan when said seat is moved from said rest position to said lowered position, and means biasing said linkage means and said actuating lever toward said in operative position.

5. In a lavatory ventilation system for use on toilet bowls, the combination comprising a tubular hinge assembly detachably secured to the rear portion of a toilet bowl and including a rotatably fixed tubular outer sleeve having a venting aperture therethrough, an oval shaped toilet seat including a tubular mounting portion at the rear portion thereof disposed in overlying sliding relationship around said outer sleeve providing for pivoting movement of said seat to and from a lowered position and a raised position, said seat adapted to snugly overlie a portion of said bowl when in said lowered position, and having a recess in the underside thereof, said mounting portion having a throat therethrough disposed in communication with said recess and said venting aperture in said outer sleeve when said seat is in said lowered position and out of communication with said venting aperture when said seat is in said raised position, a series of projections extending longitudinally along the rear periphery of said mounting portion, a spring rod supported on said tubular hinge assembly and disposed in resilient contact with said projections for resiliently biasing said seat in a rest position angularly spaced from said lowered position, a seat cover pivotally mounted on said outer sleeve, a tubular inner sleeve slidably disposed within said outer sleeve and having a venting port therethrough adapted to be disposed in communication with said venting aperture and said throat when said seat is in said lowered position, a remotely disposed exhaust fan, a remotely disposed switching means for energizing said

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exhaust fan, conduit means connecting one end of said inner sleeve to said exhaust fan, an actuating lever mounted on said one end of said inner sleeve and disposed in said conduit means, said outer and said inner sleeves provided with longitudinally aligned arcuate slots there-through, an inwardly extending actuator on said tubular mounting portion disposed in said arcuate slots for engaging and rotating said inner sleeve and said lever thereon to and from an inoperative position when said seat is disposed in said rest position and an operative position 10 when said seat is disposed in said lowered position as when occupied, adjustable linkage means extending

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through said conduit means for connecting said actuating lever to said switching means for energizing said fan when said seat is moved from said rest position to said lowered position, and means biasing said linkage means and said actuating lever toward said inoperative position. 5

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