Nov. 24, 1964 J. B. VIOLETTE 3,157,888

DOUBLE DUTY TOILET

Filed July 22, 1963

FIG. 1

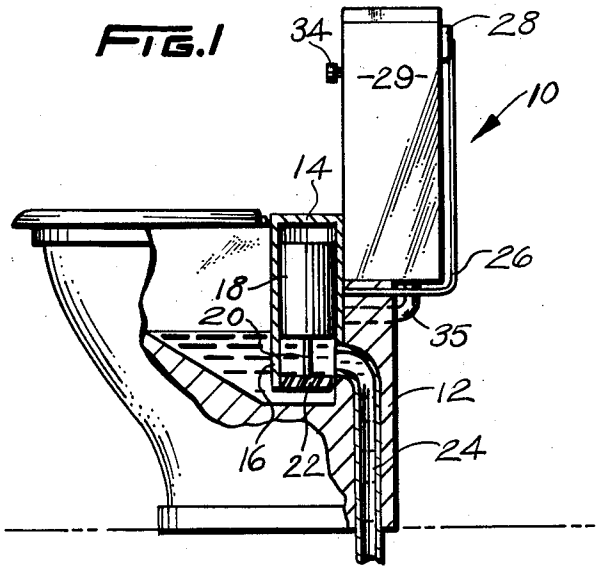


FIG. 2

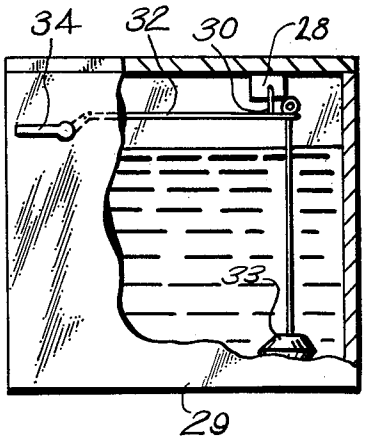


FIG. 3

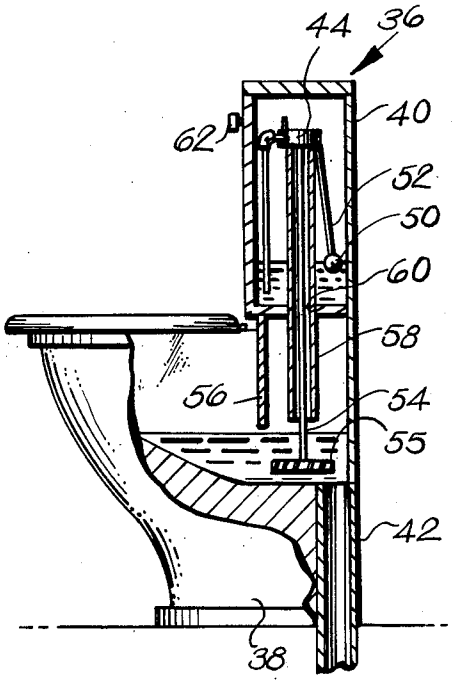
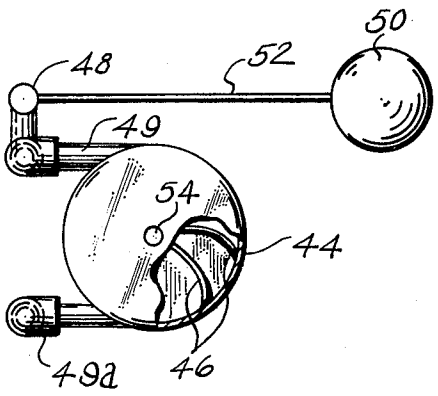


FIG. 4



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United States Patent Office 3,157,888 Patented Nov. 24, 1964

3,157,888
DOUBLE DUTY TOILET

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Filed July 22, 1963, Ser. No. 296,726
2 Claims. (Cl. 4—10)

This invention relates to toilets, and more particularly to an improved commode.

It is a primary object of the present invention to provide a double duty toilet which will have built in means to prevent clogging.

Another object of the present invention is to provide a double duty toilet which will have a modified disposal device built into the toilet to offset every day problems that arise when children cause overflow by clogging the pipes, and will thus prevent the usual clean up which follows:

A further object of the present invention is to provide a double duty toilet having a small diameter pipe, thus making it possible in some cases to install another toilet in a home without expensive installation or requiring more sewer pipes.

A still further object of the present invention is to provide a double duty toilet which will also be an advantage to families with cesspools and septic tanks.

Other objects of the invention are to provide a double duty toilet bearing the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and efficient in operation and use.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a side view of the present invention shown partly broken away;

FIG. 2 is an elevational front view of the tank shown in FIG. 1;

FIG. 3 is a side view showing a modified form of the invention; and

FIG. 4 is a top plan view of the water-powered cutter mechanism shown removed from FIG. 3.

Referring to the drawing, a double duty toilet 10 made in accordance with the present invention is shown to include a bowl 12 with a cylindrical housing 14 extending downwardly. Housing 14 is provided with an extension 16 which projects partway down into the water contained within bowl 12 and an electrical motor 18 is received in housing 14 and is secured within housing 14. The shaft 20 of motor 18 is secured to a rotary cutting blade 22 which is flush with the end of extension 16 of housing 14 and provides a means for breaking up refuse, thus preventing clogging of small diameter pipe 24, as the water is passed through it. An electric line 26 connected to motor 18 is secured to a time delay mercury switch 28 which is fixedly secured to water tank 29. An arm 30 extending from switch 28 is secured at right angles to rod 32 and thus provides a means of closing the electrical circuit to operate motor 18 and handle 34 provides handle grip means for starting the flushing and cutting operation of toilet 10. An L-shaped pipe 35 beneath tank 29 provides entrance for water from within tank 29 to enter bowl 12.

In operation, rod 32 lifts the valve 33 in the well known manner and simultaneously by means of arm 30 actuates the time delay mercury switch 28, thus closing the circuit to motor 18, and causing blade 22 on shaft 20 to rotate and munch the refuse contained within bowl 12 and thus the finely cut refuse is passed out of bowl 12 through pipe 24.

It will be recognized that as the toilet starts to flush, switch 28 will remain on for a number of seconds which

will be the normal time for flushing and will then break the electrical circuit of motor 18, thus stopping the operation of the blade 22.

A modified form of toilet 36 is shown to include a bowl 38 having a tank 40 providing reservoir means for water. The circular impeller 44 is positioned in the upper extremity within tank 40 and is provided with a plurality of arcuate blades 46 which provide the drive means for toilet 36. One side of impeller 44 is connected to the toilet faucet within tank 40 and pipe 49 extending from impeller 44 provides entrance means for water into impeller 44. A pipe 49*a* parallel with pipe 49 provides exhausting of water from within impeller 44. A hollow spherical float 50 is secured by rod 52 to toilet faucet 48 and controls the operation thereof in the well known manner. Blades 46 of impeller 44 are fixedly secured to an elongated shaft 54 which is secured at its lower extremity to a rotary munching blade 55. Rotary blade 55 is positioned beneath wall 56 which extends downwardly partially through the water line within bowl 38. Shaft 54 of impeller 44 is freely received within an elongated, hollow sleeve 58 which is fixedly secured within the circular opening 60 in the bottom of tank 40 and thus the water contained within tank 40 is prevented from escaping from around the outer periphery of sleeve 58. A handle 62 external of and in front of tank 40 provides a means of starting the flushing action. As flushing starts, water from within tank 40 enters bowl 38 in the well known manner and simultaneously water from toilet faucet 48 enters impeller 44 and urges against the blades 46 contained within, thus rotating shaft 54 and its associated rotary blade 55 which munch the refuse which is flushed down through pipe 42.

Having thus set forth my invention, it should be understood that while various changes may be made in the detail construction, such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A toilet comprising a rotary impeller having internal blade means for driving an elongated shaft which extends downwardly within an elongated hollow sleeve from a water reservoir tank and said impeller is driven by water pressure from a toilet faucet within said tank.

2. A toilet according to claim 1 wherein said water enters said impeller by pipe means from said toilet faucet and urges against said blades and said blades are secured to said shaft of said impeller and thus rotate and said rotary munching blade secured to said shaft of said impeller munches the waste and thus prevents clogging of the pipe extending from said bowl and simultaneously during the flushing cycle the rotary blade rotates and munches waste while water is received in the well known manner into said bowl of said toilet.

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EDWARD V. BENHAM, *Primary Examiner.*