Sept. 4, 1956 L. L. KAY 2,761,149

SELF-FLUSHING BEDPAN

Filed Aug. 24, 1953

2 Sheets-Sheet 1

Fig. 1.

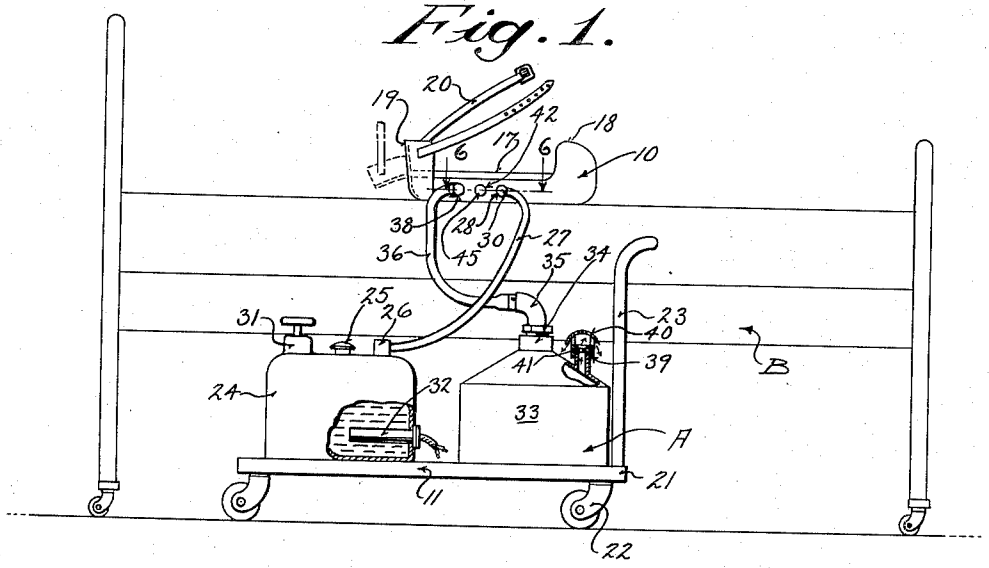


Fig. 2.

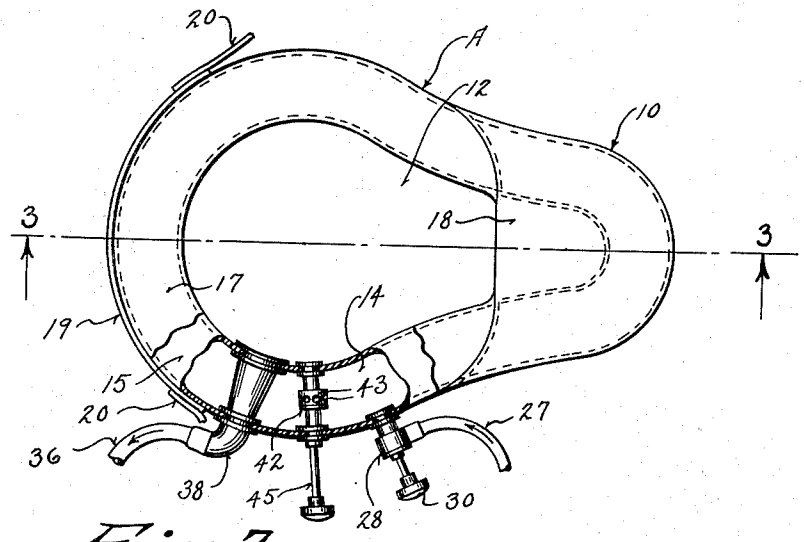
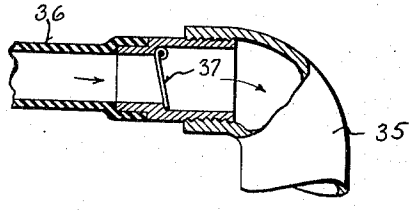


Fig. 7.



INVENTOR
LEO L. KAY

BY

Morsey & Wright

ATTORNEYS

Sept. 4, 1956 L. L. KAY 2,761,149

SELF-FLUSHING BEDPAN

Filed Aug. 24, 1953 2 Sheets-Sheet 2

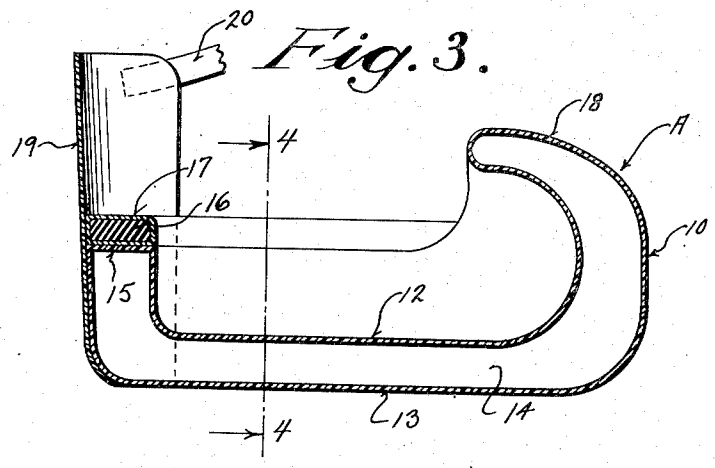


Fig. 3.

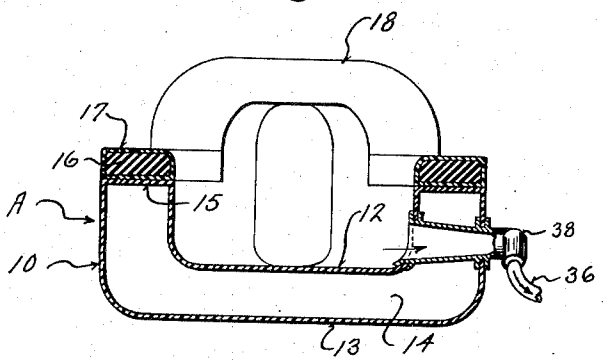


Fig. 4.

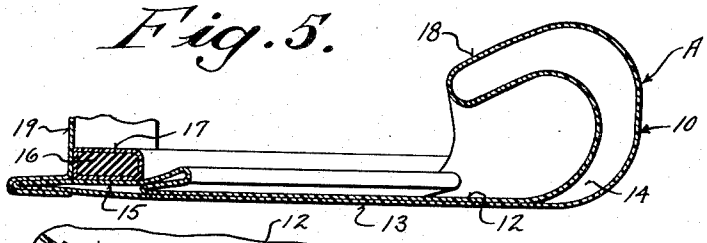


Fig. 5.

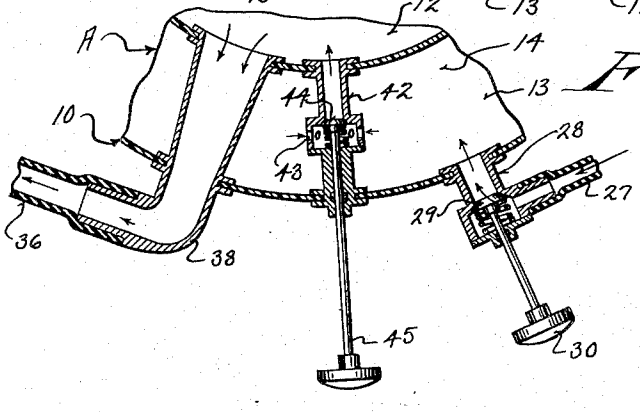


Fig. 6.

INVENTOR
LEO L. KAY

BY

Young & Wright
ATTORNEYS

United States Patent Office 2,761,149 Patented Sept. 4, 1956

2,761,149

SELF-FLUSHING BEDPAN

Leo L. Kay, Union Grove, Wis.

Application August 24, 1953, Serial No. 375,942

1 Claim. (Cl. 4—112)

This invention appertains to hospital appliances and more particularly to a novel bedpan.

One of the primary objects of my invention is to provide a bedpan for invalids and sick persons, which will be comfortable for the patient and which can be left in place under the patient ready for use at the wish of the patient.

Another salient object of my invention is to provide a flexible double-walled bedpan forming an inflatable outer chamber, with means under control of the patient for filling the chamber with water, and thereafter (under the control of the patient) for forcing the water out of the chamber by the weight of the person, for flushing the pan after use.

A further object of my invention is to provide a mobile cart or the like carrying a reservoir for flushing water under pressure and a disposal tank operatively connected with a bedpan, with means under the control of the user of the pan for flushing the bedpan with water from the reservoir and for draining the water from the pan into the disposal tank.

A still further object of my invention is to provide means for heating the water in the reservoir and for supplying a deodorant to the water should such be desired.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described and claimed, and illustrated in the accompanying drawings, in which drawings,

Figure 1 is a side elevational view of my improved bedpan apparatus showing the same in position relative to a bed, parts of the figure being shown broken away and in section.

Figure 2 is a top plan view of the bedpan with parts thereof broken away and in section to illustrate structural detail.

Figure 3 is a longitudinal sectional view through the bedpan taken on the line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a transverse sectional view through the bedpan, taken on the line 4—4 of Figure 3, looking in the direction of the arrows and illustrating more particularly the communication of the flush tube with the bedpan.

Figure 5 is a view similar to Figure 3, but showing the bedpan in its collapsed condition.

Figure 6 is a fragmentary horizontal sectional view through the bedpan, taken on the line 6—6 of Figure 1, looking in the direction of the arrows, illustrating the arrangement of the flush tube, the inlet for the flushing water to the chamber and the outlet for the flushing water from the chamber to the interior of the bedpan.

Figure 7 is an enlarged detail vertical sectional view through the connection of the flush pipe with the disposal tank, the view illustrating the one-way check valve in the connection.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts

throughout the several views, the letter A generally indicates my improved apparatus for use in hospitals and the like in connection with a bed B.

The bed B forms no part of this invention and can be of any desired construction.

My improved apparatus A embodies a bedpan 10 adapted to be placed on the bed B under a patient, and a mobile cart 11 carrying certain appliances, as will be later set forth.

The bedpan 10 is preferably formed from flexible material, such as sheet plastic, rubber or the like, and is shaped somewhat to correspond to the ordinary configuration of rigid bedpans, and the same includes an inner wall 12 and an outer spaced wall 13 forming in between the same, a compartment or chamber 14, which is adapted to be filled with water under pressure. The inner and outer walls 12 and 13 are united at their upper edges by a flat top wall 15 on which the patient rests, and this top wall can have secured thereto by suitable adhesive or the like, a strip of sponge or foam rubber 16, to form a cushion for the patient, and hence add to the comfort of the patient. This strip of sponge rubber 16 also adds some rigidity to the bedpan to aid in holding the desired shape of the bedpan. The exposed surface of the cushion 16 can be covered by a skin 17 of waterproof material. The front of the bedpan narrows and curves upwardly and rearwardly, as at 18, so as to fit between the legs of a person and to somewhat cover the crotch of a person. Secured to the rear end of the bedpan by a suitable adhesive, or the like, is a flexible apron or waist band 19, which is adapted to snugly contact the back of the patient, and a strap 20 can be carried by the apron to fit around the waist of the person and hold the apron in contact with the back of the patient.

As brought out in the objects of the specification, one of the main features of the invention is to provide means for inflating the chamber or compartment 14 with flush water and to thereafter use this water for flushing the bedpan. To accomplish this purpose, certain appliances are carried by the mobile cart 11, which will now be described. If preferred, a deodorant can be used with the water.

The mobile cart 11 can be of any desired construction and arrangement, and as illustrated, the same includes a platform 21 mounted on wheels 22 which can be of the castor type. The cart is provided with a handle 23, so as to facilitate the wheeling thereof from one bed to another. Mounted on the platform 21 is a reservoir 24 for holding a desired quantity of water, and this water is utilized for first inflating the chamber or compartment 14 and then flushing the bedpan. The reservoir is provided with a filling nipple 25, whereby the tank or reservoir 24 can be easily filled and the same can be closed by a removable cap. Carried by the reservoir is an outlet nipple 26 with which a flexible hose 27 is connected. This hose leads to and is connected with a fitting 28 which communicates with the interior of the chamber or compartment 14. The fitting is provided with a spring pressed valve 29 which controls the flow of water from the hose 27 to the compartment or chamber 14. The valve 29 is provided with a handle 30 and the patient using the pan merely has to reach forward and pull outward on the handle to open the valve against its spring to fill the compartment with water. Any desired means can be employed, such as a pump, for forcing the water from the reservoir into the chamber, and I prefer to force the water from the reservoir by air pressure and hence the reservoir can be provided with a hand air pump 31, for pumping air into the tank. If desired, the temperature of the water can be raised by the use of an electric heater 32, which can be of the immersion type.

Also arranged on the platform 21 is a tank 33 which

I term a disposal tank, in that the same receives the flush water from the bedpan.

The disposal tank **33** is provided with a relatively large inlet **34** having detachably connected therewith a fitting **35** to which a flexible hose **36** is connected. The fitting **35** can be provided with a one-way opening check valve **37**, so that flushing water can flow past the valve and into the tank but escape of odors and the like will be prevented. The flexible hose **36** in turn leads to and is connected with a flush pipe **38** which extends through the inner and outer walls **12** and **13** and the chamber **14**. The flush pipe widens out into the interior of the bedpan so as to permit the free flow of water into the same. The disposal tank **33** is also provided with an air outlet **39** partially covered by a dome shaped cap **40**, and this cap can be provided with filter pads **41**. It is to be also understood that the disposal tank can have placed therein a desired deodorant.

Means is provided for controlling the flow of water from the compartment or chamber **14** into the bedpan itself, and this means includes a valve **42**. This valve **42** embodies a casing communicating with the interior of the bedpan and the casing is provided with water inlets **43** opening into the chamber or compartment **14**. A spring pressed valve body **44** normally prevents the flow of water through the casing of the valve **42** into the body of the bedpan and this valve can be moved off of its seat by means of a handle **45** which extends outward of the bedpan within convenient reach of the patient.

In use of the bedpan, the cart is wheeled alongside of the bed B and the bedpan is placed under the patient in its deflated condition, with the belt or strap **21** around the waist of the patient. When the patient desires to use the pan, the valve **29** is opened and water from the reservoir **24** will be forced into the compartment or chamber **14** to inflate the bed pan. After the desired amount of water has been forced into the compartment, the valve **29** is released by the patient so that further flow of water into the compartment is stopped. After the use of the bedpan, and when it is desired to flush the same, the patient then opens the flush valve **44** and the weight of the person will force the water out of the compartment **14** and into the bedpan, and the water will flow out of the flush pipe **38** past the check valve **37** and into the disposal tank.

As the bedpan is formed from flexible material and is provided with a cushion **16**, the same will be comfortable to use and normally when the bedpan is not in use, the bedpan will lie substantially flat on the bed.

Changes in details may be made without departing from the spirit or the scope of this invention, but what I claim as new is:

A hospital or like appliance comprising a bedpan formed from flexible material and including inner and outer spaced shells defining a compartment therebetween, a sponge rubber cushion connected with the outer spaced shell to hold a certain shape in plan, a mobile cart, a reservoir tank for flush water mounted on the cart, a disposal tank mounted on the cart, a flexible tube connecting the reservoir tank with the compartment, valve controlled means for regulating the flow of water from the reservoir to the compartment, a flush pipe communicating with the interior of the bedpan, a flexible hose between the flush pipe and the disposal tank, and means for controlling flow of water from the compartment into the interior of the bedpan.

References Cited in the file of this patent

UNITED STATES PATENTS

652,889	Campbell	July 3, 1900
653,842	Brown	July 17, 1900
716,426	Jamison	Dec. 23, 1902
1,362,751	Snyder	Dec. 21, 1920
1,685,693	Claus	Sept. 25, 1928
2,394,091	Merwin	Feb. 5, 1946

FOREIGN PATENTS

102,753	Australia	Dec. 23, 1937
245,318	Switzerland	July 1, 1947
608,448	Great Britain	Sept. 15, 1948