(No Model.)

E. D. LEWIS.

DISINFECTING APPARATUS.

No. 598,053. Patented Jan. 25, 1898.

Fig. 1.

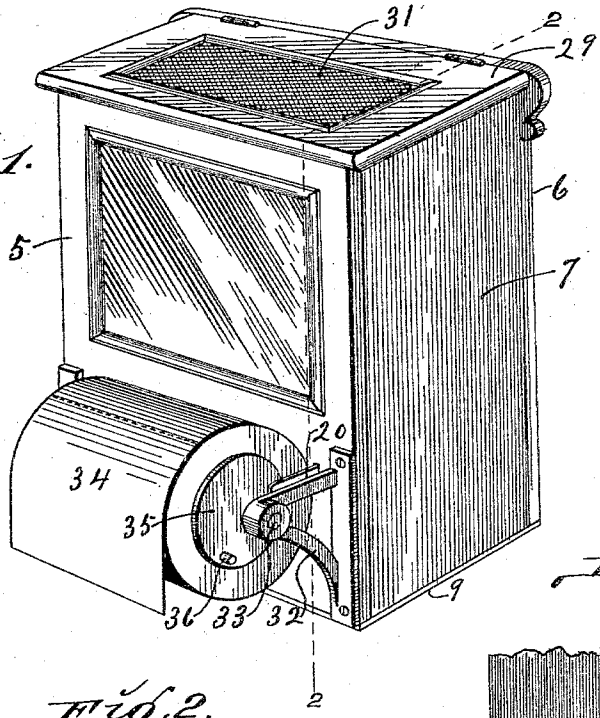


Fig. 2.

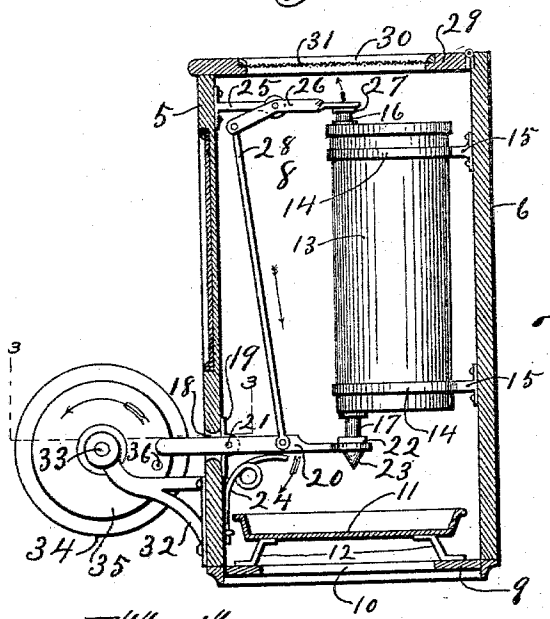


Fig. 3.

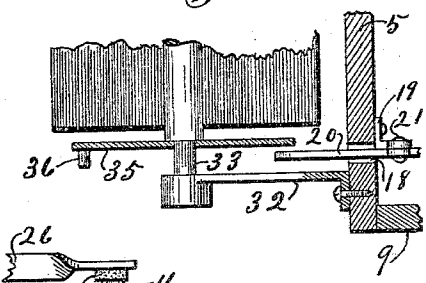
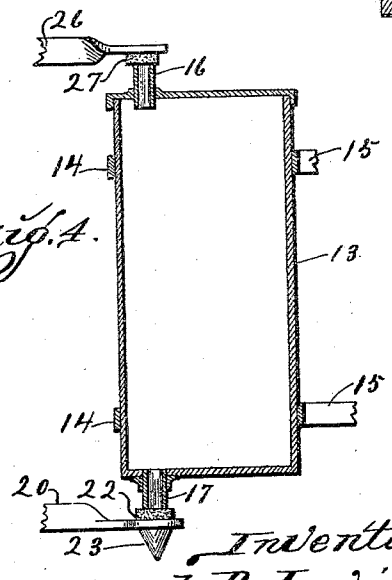


Fig. 4.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD D. LEWIS, OF ST. LOUIS, MISSOURI, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO WILLIAM C. SHIELDS, OF SAME PLACE, AND TO THE CANNON CHEMICAL COMPANY, OF MISSOURI.

DISINFECTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 598,053, dated January 25, 1898.

Application filed March 1, 1897. Serial No. 625,627. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. LEWIS, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Apparatus for Holding Toilet-Paper and Disinfectant, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an apparatus for holding toilet-paper and disinfectant; and it consists in the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a view in perspective of the device ready for use. Fig. 2 is a vertical transverse sectional view taken approximately on the line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view taken approximately on the line 3 3 of Fig. 2, parts being broken away. Fig. 4 is a vertical sectional view taken on a line parallel with the line 2 2 and through the disinfectant-can.

In the construction of a device of the class described in accordance with the principles of my invention I employ a rectangular box having the front wall 5, the rear wall 6, and the end walls 7 and 8. The bottom 9 is placed in the lower end of the box thus formed and has a large opening 10 formed through its center. The drip-pan 11 has the upper ends of the legs 12 attached to its bottom, and the lower ends of said legs rest upon the bottom 9, thus bringing the pan 11 above the opening 10. The disinfectant-can 13 is in the form of a cylindrical tank. The straps 14 engage tightly around the can and are attached to the brackets 15, which brackets are in turn attached to the front face of the rear wall 6, as required, to support said can in position above the drip-pan 11. A nipple or short section of pipe 16 is inserted through the top of the can and soldered or otherwise secured in position, and a similar nipple 17 is inserted through the bottom of the can. An opening 18 is formed through the front piece 5 and near to the end piece 7, and a perforated ear 19 is attached to the rear face of said front piece 5 and to one side of said opening 18. The lever 20 is pivotally attached to said ear 19 by means of the pin 21. The lever 20 extends backwardly to a position below the lower end of the nipple 17, and a block of rubber 22, constituting a valve, is attached to the upper face of said lever in position to close the lower end of said nipple 17. A cone-shaped lug 23 is attached to the lower face of the lever 20 in vertical alinement with the block of rubber 22 and pointing downwardly. A spring 24 is attached to the inner face of the front piece 5 and in position to have its free end engage under the lever 20, as required, to hold the rear end of said lever elevated and hold the valve 22 yieldingly in contact with the lower end of the nipple 17. The front end of the lever 20 projects outwardly to a point a short distance in front of the front piece 5.

A bracket 25 is attached to the rear face of the front piece 5 and near its upper end, and a lever 26 is pivotally attached to the rear end of said bracket, the rear end of said lever 26 extending to a position above the upper end of the nipple 16, and a block of rubber 27, constituting a valve, is attached to the lower face of said lever and in position to engage and close the upper end of said nipple. The lever 26 extends a short distance in front of its pivot, and a connecting-rod 28 connects the front end of said lever 26 with a point upon the lever 20 in the rear of the pivot of said lever 20 in such a way that when the rear end of the lever 20 is depressed the rear end of the lever 26 will be elevated. The upper end of the box is closed by the cover 29, which cover is hinged to the back piece 6, and a large opening 30 is formed through said cover and the screen 31 is stretched over said opening and secured to said cover.

Attached to the front face and near the side edges of the front piece 5 are brackets 32, in the forward ends of which brackets the spindle 33 operates, and the spindle 33 is inserted through the roll of paper 34, as required to mount said roll between said brackets. Attached to one end of the spindle 33 is a disk 35, and a pin 36 projects from the face of said disk near its edge and in position to engage the forward end of the lever 20.

The can 13 is filled with suitable liquid dis-

infectant and is held closed by the operation of the spring 24 pressing the valve 22 upwardly and the valve 27 downwardly, thus closing the nipples 17 and 16. When the paper is drawn from the roll 34, the disk 35 is rotated. The pin 36 engages under the forward end of the lever 20 and elevates said forward end, thus depressing the valve 22 and allowing a small amount of the disinfectant to run out of the can through the nipple 17. At the same time the valve 22 is depressed the valve 27 is elevated, thus allowing a small amount of air to pass into the can 13 through the nipple 16 and allowing a small quantity of the disinfectant to pass out of the can through the nipple 17, and said disinfectant will run down the conical lug 23 and drip from its point into the pan 11, from which pan it will be evaporated and carried upwardly through the screen 31 and distributed into the room. Air will pass upwardly through the opening 10 in the bottom 9, and after receiving the disinfectant from the pan 11 will pass upwardly through the screen, and thus will be maintained a circulation which will materially aid in distributing the disinfectant to all parts of the room.

A device of the class described is very efficient for the purpose stated and at the same time is inexpensive in construction and simple in operation.

I claim—

1. In an apparatus of the class described, a suitable box having a ventilated bottom and a ventilated top, a disinfectant-receptacle mounted in said box and having a vent in its upper end and an outlet-opening in its lower end, a pivoted lever carrying a valve to open and close said outlet-opening, a pivoted lever carrying a valve to open and close said vent, connections between said pivoted levers whereby said valves are operated simultaneously, a spring engaging one of said levers as required to hold said valves closed, and means of operating said lever, substantially as specified.

2. In an apparatus of the class described, a suitable box having a ventilated bottom and a ventilated top, a disinfectant-receptacle mounted in said box and having a vent in its upper and an outlet-opening in its lower end, a pivoted lever carrying a valve to open and close said outlet-opening, a pivoted lever carrying a valve to open and close said vent, connections between said pivoted levers whereby said valves are operated simultaneously, a spring engaging one of said levers as required to hold said valves closed, means of operating said levers, and a drip-pan mounted below said disinfectant-receptacle, substantially as specified.

3. In an apparatus of the class described, a suitable box, a disinfectant-receptacle mounted in said box and having an outlet-opening in its lower end, the lever 20 pivotally mounted in a horizontal position and extending through the front wall of the box, a valve carried by one end of said lever 20 and operating to open and close said outlet-opening, a spring engaging said lever as required to normally hold said valve closed, a spindle 33 mounted in front of said box, a crank-pin 36 attached to and carried by said spindle 33 and engaging the end of the lever 20 opposite said valve as required to open said valve, and means of operating said spindle, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD D. LEWIS.

Witnesses:
EDWARD E. LONGAN,
MAUD GRIFFIN.