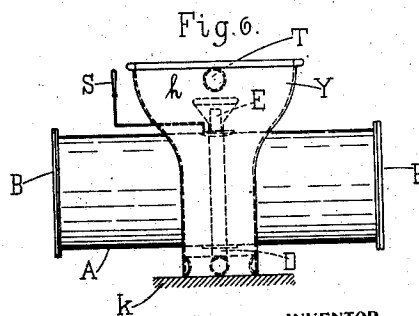
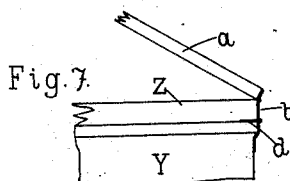
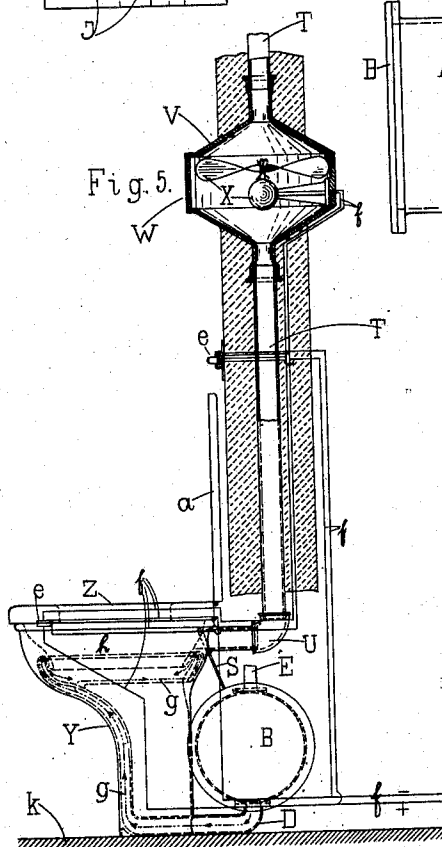
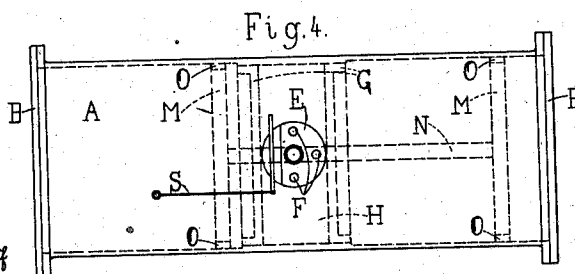
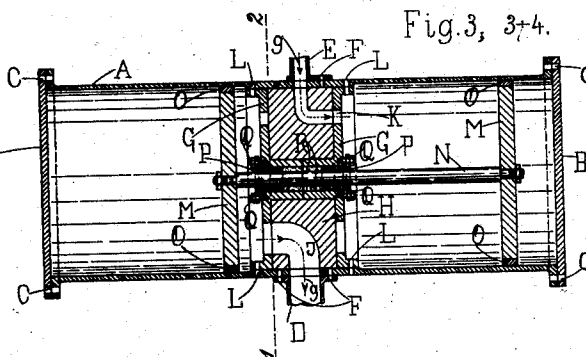
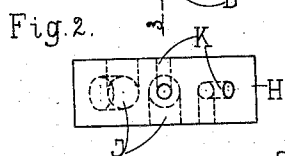
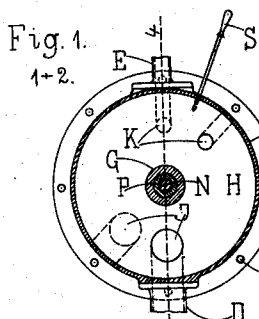


D. RODREICK.
VACUUM AND FLUSHING APPARATUS.
APPLICATION FILED JUNE 3, 1908.

Patented Jan. 18, 1910.

947,189.



WITNESSES

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VACUUM AND FLUSHING APPARATUS.

947,189.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed June 3, 1908. Serial No. 436,520.

To all whom it may concern:

Be it known that I, DAVID RODREICK, a citizen of the United States, resident of San Diego, in the county of San Diego, State of California, have invented a new and useful Vacuum and Flushing Apparatus, of which the following is a specification.

My invention relates to vacuum and flushing apparatus of the character shown and described in the accompanying drawings, to be applied to toilet fixtures, the vacuum being produced by the construction of an electric fan, applied in the vent or escape pipe of the fixture. A flushing apparatus constructed of a cylinder form with piston connections provided with port and exhaust to receive and discharge water under pressure, working systematically from either side, and operated by means of a lever.

The object of my invention is to produce an economically constructed vacuum and flushing apparatus for toilet fixtures, that is perfect in its operating and sanitary qualities.

In carrying out my invention I do not wish to be understood that it is confined to the details shown by the accompanying drawings. The inventive idea is broader than the particular embodiment herein presented and described, and embraces in construction and mechanism that which comes within the scope of the claim.

In the drawings, Figure 1 shows an end and sectional view of a flushing apparatus, cut in two on line 1—2. Fig. 2 is the center part of the flushing cylinder, containing the ports and acts as a separating appliance for the two parts of the cylinder. Fig. 3 is a side and sectional view of the flushing cylinder complete, cut in two on line 3—4. Fig. 4 is a top view of the flushing cylinder, dotted lines representing the inner working ports of the cylinder. Fig. 5 is a side and sectional view of a toilet fixture with the vacuum and flushing apparatus applied, constructed in a perfect working form. Fig. 6 shows the manner in which the cylinder is placed between the fixture and the wall. Fig. 7 is a part of the fixture with lid appliances attached to show the manner of applying the same.

Similar letters refer to similar parts throughout the several views.

A is the shell of the cylinder.

B are the heads of the cylinder.

C are holes in the flange of the cylinder through which bolts may be inserted to fasten the heads of the cylinder on.

D is the discharge pipe, attached to the bottom part of the cylinder.

E is the receiving pipe which is fastened to the cylinder by bolts F.

G are plates which form a part of the separating and center section of the cylinder.

g are arrow heads, showing the direction of the flow of water.

H is the separating and center section of the cylinder.

J is a discharge port of the cylinder.

K is the receiving port.

L are holes provided for bolts to fasten the center separating head in the cylinder.

M are the piston heads.

N is the piston rod.

O is a packing ring or gasket, attached to each piston head M.

P are the piston rod stuffing boxes.

Q are stuffing box fastenings.

R is the stuffing box packing.

S is a lever used to operate the valve connections and piston appliances.

T is the vent pipe, provided with a sleeve U.

V is the casing or inclosure of the fan.

W is a door or opening to the fan inclosure.

X is the fan.

Y is the flushing appliance.

Z is one part of the cover or lid of the flushing appliance.

a is the lid.

b and d are the hinge connections to the lid and cover appliance.

e is a button connection on the wall, also on the flushing apparatus.

f is the electric wires that connect the current of electricity at points e to operate the fan.

h is a conical shaped rim on the inner part of the flushing appliance.

When the handle S is grasped by the operator to throw the central section of the cylinder to the position illustrated in Fig. 3, water under pressure through one of the ports K, (see Fig. 2) passes to the right hand end of the cylinder A driving the right hand piston M toward the right. The water contained between the left hand piston M and the central section of the cylinder is

driven out through pipe D, (see Figs. 3 and 5) and is caused to overflow into the bowl. When the handle is thrown in the opposite direction, the other port K brings the left hand end of the cylinder into communication with the inlet pipe E and the left hand piston is driven toward the left. At this time the other port J, shown in dotted lines in Fig. 1, is establishing communication between the right hand end of the cylinder in Fig. 3 and the pipe D. The water between the right hand piston M and the central portion of the cylinder will now be driven out from the pipe D and overflow into the bowl. It will therefore be seen that the present invention provides a very simple and efficient means for forcing a predetermined amount of water into the bowl each time the handle S is moved in either direction. It will also be seen that an electric circuit to the fan X will be closed when the push button E is actuated or when the cover A of the bowl is lowered to bring the contact points *e'* into engagement with each other.

I claim—

In a device of the character described, the

combination with a bowl, of a conduit leading thereto, a cylinder, a centrally disposed oscillatory section disposed within said cylinder, a handle for oscillating said section, said section having ports formed therein which when said section is at one of its limits of movement, admit water to the right hand end of the cylinder and establish communication between the left hand end of the cylinder and the conduit, and when said section is at its opposite limit of movement establish communication between the left hand end of the cylinder and a source of water supply and establish communication between the right hand end of the cylinder and the conduit, a piston located in said cylinder upon each side of said central section, a piston rod connecting said pistons, plates G spanning said cylinder and holding said central section in position, and packing members carried by said plates which form a fluid tight packing about said piston rod.

DAVID RODREICK.

Witnesses:

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H. VANDERVOORT.