

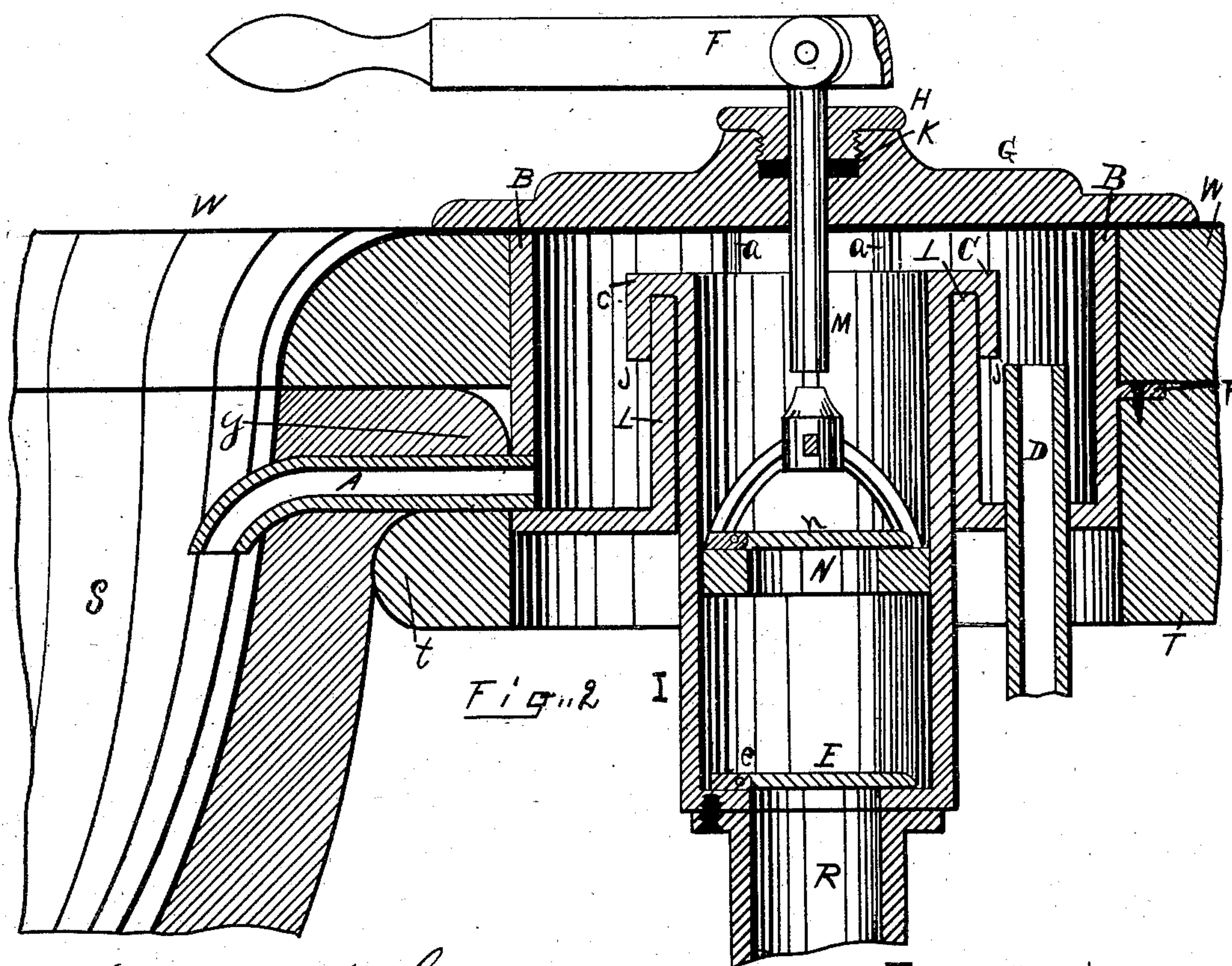
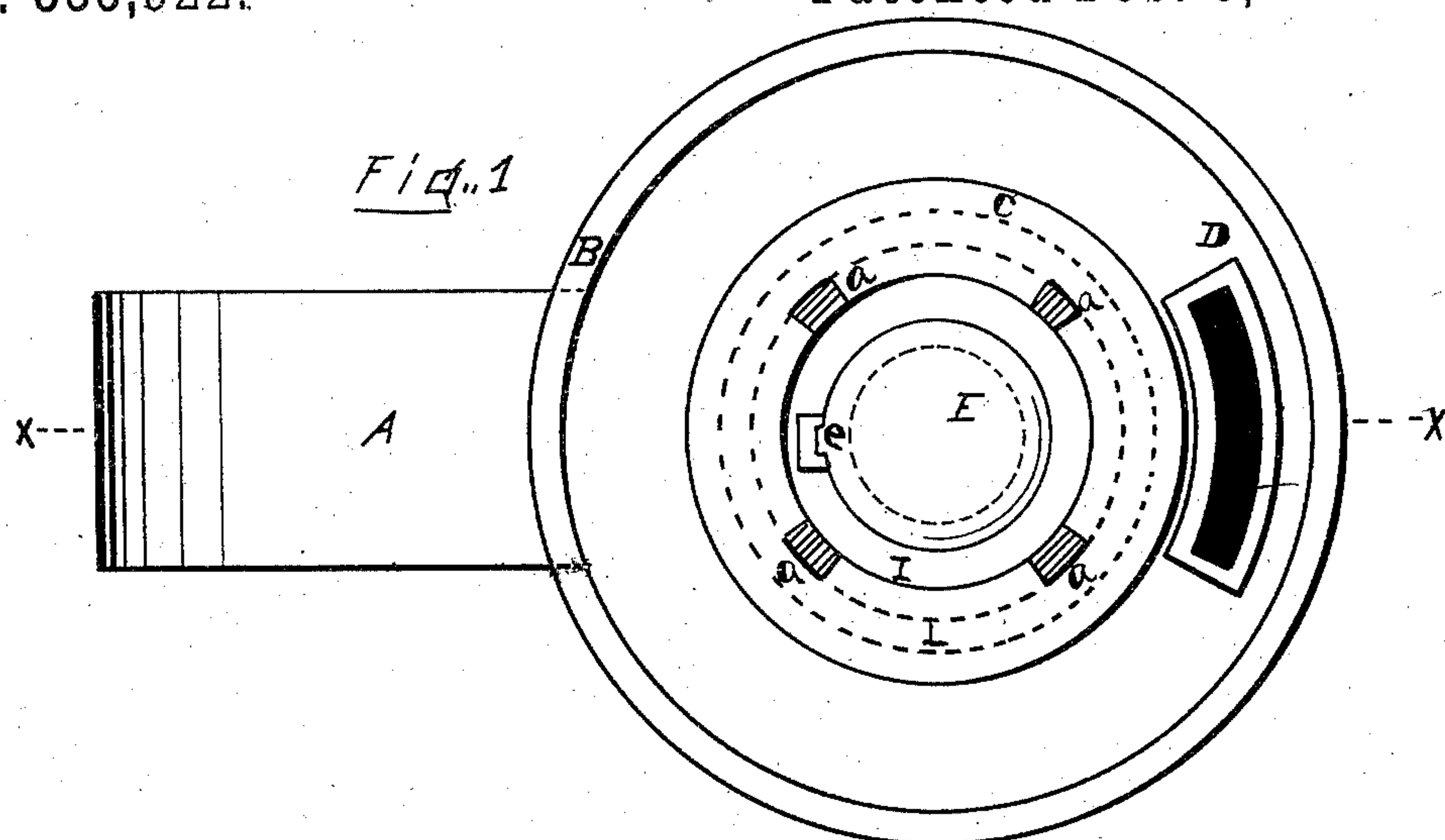
(No Model.)

H. C. HART.

WASH BOWL AND PUMP FOR SLEEPING CARS.

No. 335,922.

Patented Feb. 9, 1886.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY C. HART, OF DETROIT, MICHIGAN.

WASH-BOWL AND PUMP FOR SLEEPING-CARS.

SPECIFICATION forming part of Letters Patent No. 335,922, dated February 9, 1886.

Application filed March 6, 1885. Serial No. 157,956. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. HART, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Wash-Bowls and Pumps for Sleeping-Cars, of which the following is a specification.

My invention consists in certain improvements in sleeping-car wash-stands, whereby I conceal the spout of the pump which raises water into the bowl, and lower the lever which operates the pump, so that it is less in the way than with the present construction, and also prevent the water from being forced violently into the bowl when the pump is used, all of which are fully pointed out in the claims.

Figure 1 is a plan view of a pump and its connections with the bowl, omitting the piston, lever, and cover; and Fig. 2 is a section on the line *x x*, Fig. 1.

In modern sleeping-cars it is usual to build a lavatory in which one or more wash-bowls are secured beneath a marble slab, a pump is placed at the side of each bowl, and a water-tank is placed beneath the wash-bowls, from which water is raised by the pumps.

W represents a portion of the marble slab, S a portion of the wash-bowl, and T the wooden frame by which the slab and bowl are usually supported, the flange Y of the bowl resting on the wooden frame. These parts are the same as now commonly made, and need no detailed description.

Ordinarily the pump is attached to a metal plate secured to the top of the marble slab, and is operated by a lever pivoted to the piston-rod and pivotally fulcrumed to a support, also pivoted to said plate, the cylinder and suction-pipe running down through said plate into the water-tank, and the spout extending over the marble slab to a point where it will discharge into the bowl.

I lower the pump in the following manner:

B represents an annular water-chamber sunk about flush with the top of the marble slab, and supported by a flange, P, resting on and screwed to the wooden frame which supports the slab. To the lower side of this annular chamber B is secured a spout, A, which runs through a notch cut in the upper edge of the bowl and beneath the marble slab, so that it is wholly concealed from view.

D represents an overflow-pipe running through the bottom of the annular chamber B, and discharging into a water-tank beneath the bowl, to prevent any water from running over the top of the annular chamber. The inner side of the annular chamber (marked L) is lower than the outer side thereof.

I represents a pump-barrel having therein an ordinary clack-valve, E, hinged at *e*, and having attached to its lower end a suction-pipe, R, which extends into the water-tank beneath. The upper end of the pump-barrel is open, and has an overlapping flange, C J, which fits over the top of the inner side of the annular chamber B, so as to make a reasonably-tight joint between them, as shown in Fig. 2.

M represents a piston-rod, and N represents a piston attached thereto, having therein an ordinary clack-valve, *n*, thus making, with barrel I, an ordinary suction-pump.

G represents a metal plate designed to cover the hole made in the marble slab to receive the annular chamber B, and may have therein a stuffing-box, H, provided with packing K, through which the piston-rod M works.

F represents a lever, one end of which is finished off as a handle, and the other end is pivotally fulcrumed to a post (not shown) rising from plate G. The upper end of piston-rod M is pivoted to lever F, as shown, and I prefer to cut a slot in the lever to receive the pivot, and in this way compensate for the difference of the lines of motion of the piston-rod and lever.

a a a a represent four short rods, one end of which is secured to the pump-barrel and the other end to plate G, so that by raising said plate the pump and suction-rod can be lifted out.

When the pump is operated, it lifts water from the tank and discharges it into the annular chamber B, whence it flows by gravity and gently through the spout A into the bowl, and any surplus that cannot pass through the spout passes back into the tank through the overflow-pipe D.

The piston-rod is preferably made just long enough to couple to the lever when the latter is as far depressed as can be done without bringing the hand of the operator in contact with the marble, so that the lever need not rise far from the marble, and therefore the ful-

crum can be short, and is not as liable to be wrenched and bent as is the long pivoted fulcrum at present used, and the lever is also out of the way of persons using the bowl.

5 While I have shown the water-chamber as annular, it is evident that it may be of any other form, and also that it may be connected with and form a part of the pump-barrel itself, instead of being separate. I have illustrated it as separate because that mode of construction facilitates the removal of the pump
10 for repairs, and as annular because that form will fit into the places now existing in sleeping-cars; but by simply using the upper end
15 of the pump-barrel as a water-chamber, either of the same size or enlarged, and attaching the spout A thereto at any convenient point above the stroke of the piston, a mechanical equivalent of my invention will be obtained.
20 It is also evident that the spout A may be placed above the bowl, instead of passing through a notch cut therein, as the marble slab used in sleeping-cars is ordinarily so thick
25 without exposing said spout to view from above.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a wash-bowl and a covering-slab, of marble or other suitable material, of a water-chamber connected with said bowl at a point below the surface of the covering-slab, and having an opening adapted to receive the cylinder of a pump, and a pump fitting in said opening and delivering water
35 to said chamber instead of directly to the wash-bowl, substantially as described.

2. In combination with the covering-slab W and wash-bowl S, the water-chamber B, sunk in said slab and having a flange, P, thereon, resting upon the frame which supports the slab and bowl, and also having a spout, A, leading to bowl S at a point below the surface of the slab W, and the pump-barrel I, having thereon the flange C J, overlapping the upper
40 edge of chamber B, and the piston and rod N M and lever F, substantially as shown and described.

HENRY C. HART.

Witnesses:

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