

(No Model.)

J. PENNEY.

DEVICE FOR EJECTING WATER OR OTHER LIQUIDS FROM CONTAINING
TANKS TO BASINS.

No. 428,943.

Patented May 27, 1890.

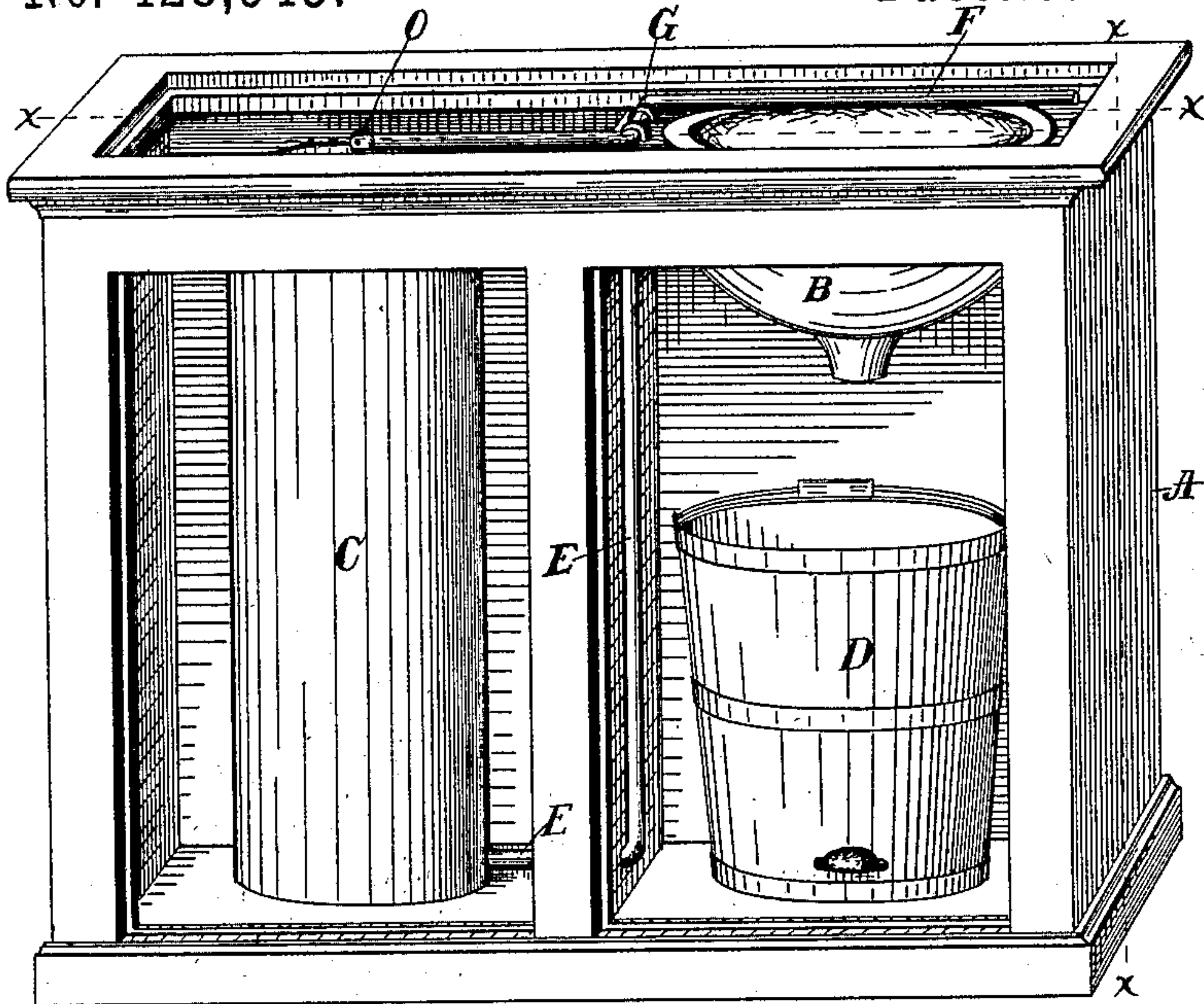


FIG. 1.

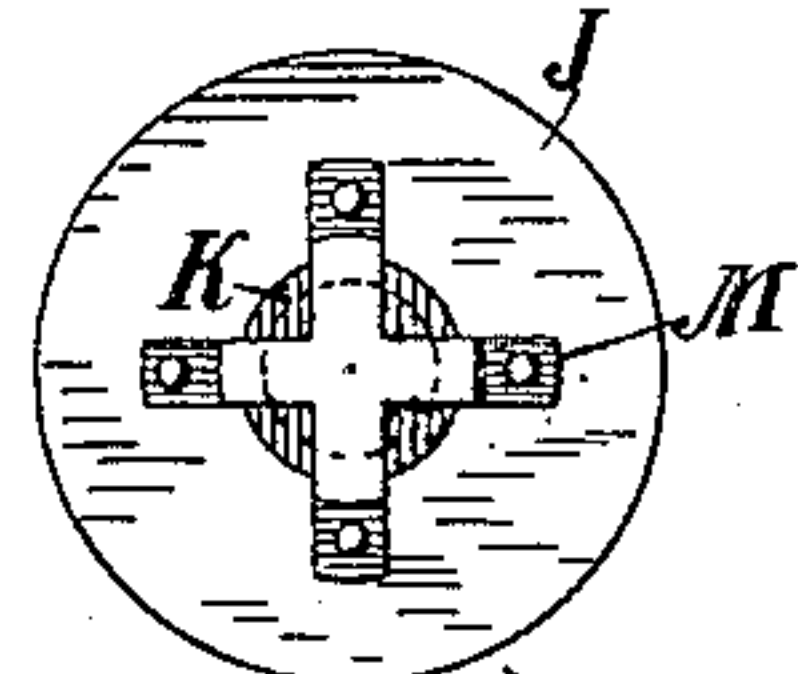


FIG. 3.

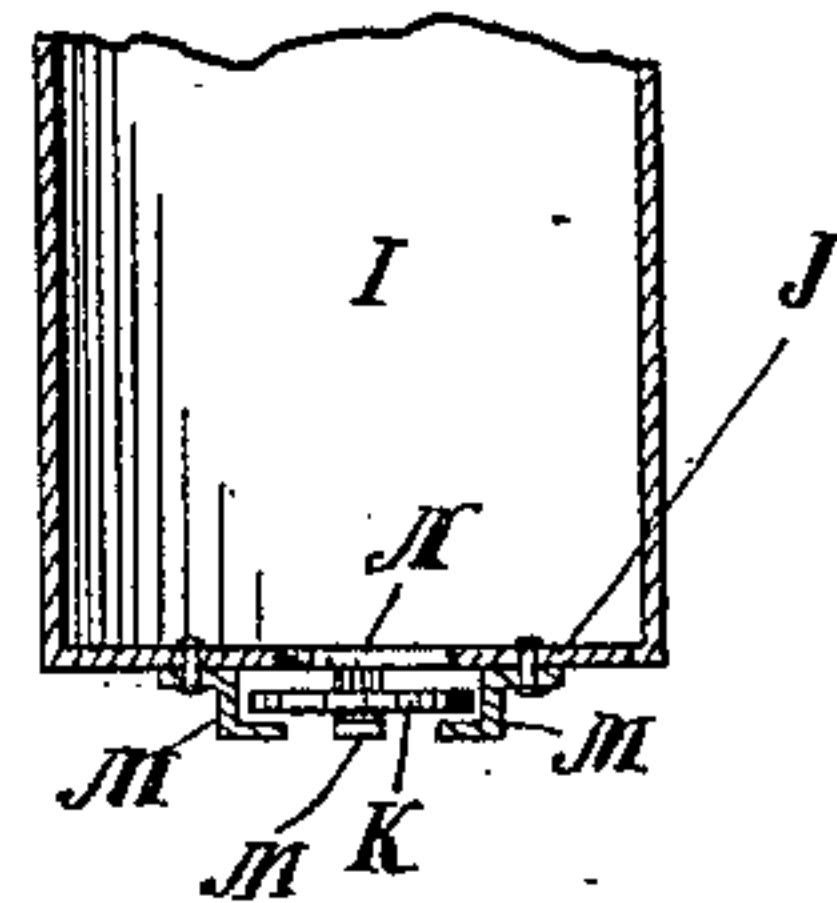


FIG. 4.

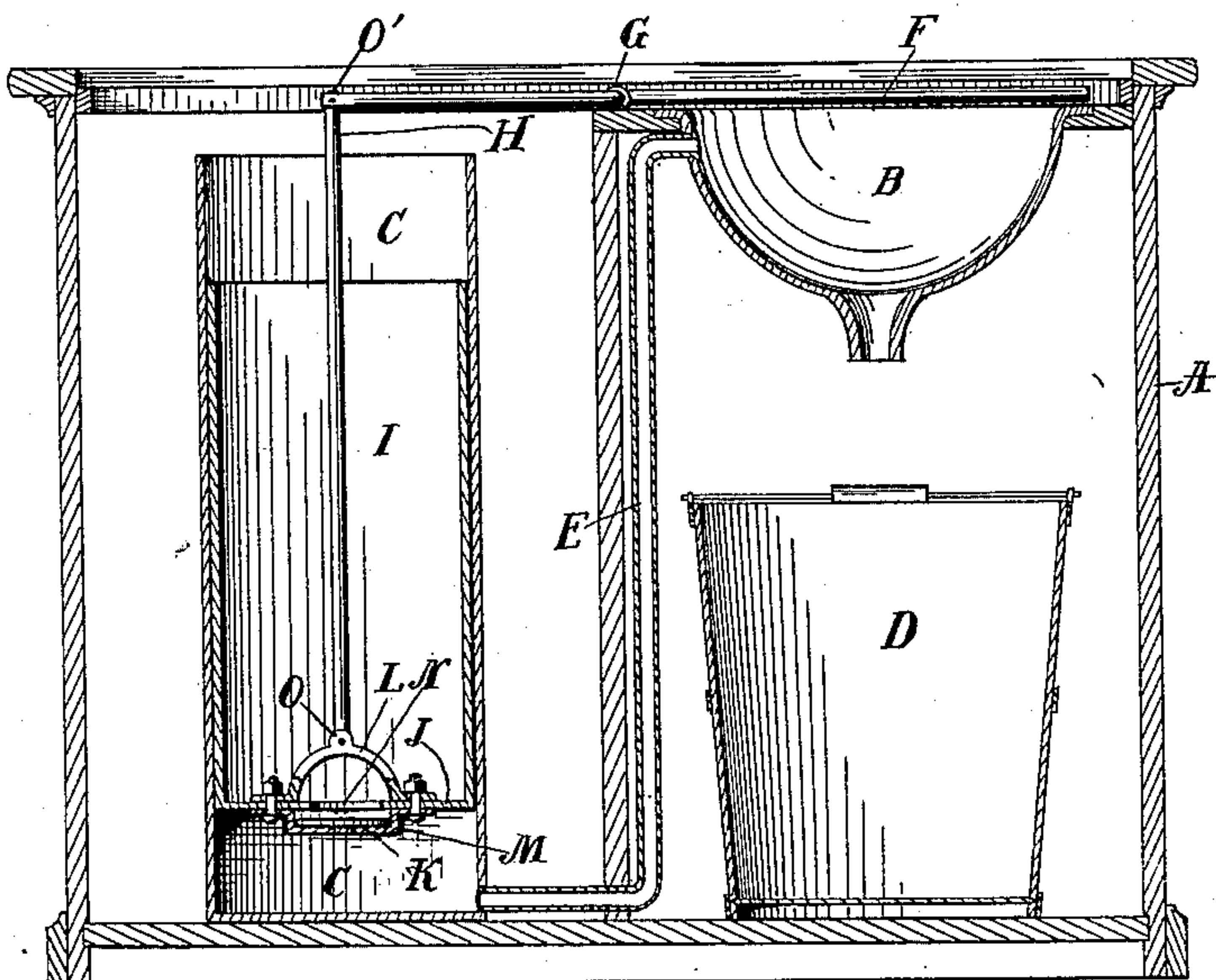


FIG. 2.

Witnesses

George Clapperton
Harry P. Van Wagner

Inventor

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UNITED STATES PATENT OFFICE.

JOSEPH PENNEY, OF GRAND RAPIDS, MICHIGAN.

DEVICE FOR EJECTING WATER OR OTHER LIQUIDS FROM CONTAINING-TANKS TO BASINS.

SPECIFICATION forming part of Letters Patent No. 428,943, dated May 27, 1890.

Application filed June 7, 1888. Serial No. 276,398. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH PENNEY, a citizen of the United States, residing in the city of Grand Rapids, county of Kent, and State of Michigan, have invented a new and useful Device for Ejecting Water or other Liquid from a Containing Tank or Reservoir to a Basin or other Receptacle, of which the following is a specification.

My invention relates to the class of portable and stationary wash-stands in which the water is supplied from a tank located at a lower level than the wash-stand, and provides devices for forcing the water from the tank into the basin without the interposition of pumping-lift and check-valves and the usual packing incident to such appliances.

The objects of my invention are, first, to construct a cheap and effective device for transferring water directly from a lower tank to a higher basin, and, second, to utilize the tank itself as one of the elements in ejecting the water contained through a pipe or conductor from itself to the required receptacle. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a case with the front removed, in order to show the interior arrangements of the case and the position of the tank, basin, and connecting-pipe. Fig. 2 is a vertical sectional view on line X X of Fig. 1. Fig. 3 is a plan view of the bottom of the inclosed and movable displacement-plunger hereinafter described; and Fig. 4 is a sectional view of the same, showing a modified form of fixtures and float-valve.

Similar letters refer to similar parts throughout the several views.

The casing is shown by A, and may be of any suitable design or form or material.

C represents a tank, which may be of any form desired, preferably cylindrical.

I is a displacement-plunger (made of any suitable material) placed within tank C, fitted to slide freely against its walls, and having in its bottom an opening N, the two together forming the supply tank or reservoir, which may be filled from the top in the ordinary way.

B is the wash-basin. E is a pipe connecting the bottom of the tank C with the wash-

basin. I prefer to so connect the pipe E to the tank, as a side pipe to it, that they may be removed together from the case A.

J is the bottom of the displacement-plunger I. N is an opening through it, and beneath the opening N is placed a valve K, which I prefer to make of cork or other light material, which by its buoyancy will keep always against its seat without hinging or other fastening than the confining-straps M, which prevent it from floating away. Upon pouring water into the top of the tank this valve offers no resistance to the complete filling of the entire tank C above and below the valve simultaneously, and the water stands in the conducting-pipe at the level of that in the tank, being entirely open to the bottom of the tank. To the bottom of the displacement-plunger I a bail L is attached, and to that a connecting-rod H, loosely hinged at O, is fastened, and the upper end of said connecting-rod is similarly hinged at O' to a two-armed lever F, which forms part of a rock-shaft G, fulcrumed below the top of the case, the two arms of the said lever F being so arranged that one extends above the tank C and connects with the plunger-rod, while the other arm extends in the same plane above the basin and serves as a hand-lever. The lever for controlling the motion of the plunger-rod is thus below the horizontal plane of the top of the casing and out of the way.

The displacement-plunger upon being raised by means of the connecting-rod and the fulcrumed lever F produces no effect on the contained water, merely passing through its volume upward, but upon being, by reversal of the motion, depressed forces the water which is below the floating-valve through the conducting-passage into the basin, except such portions as by the loose telescopic fit of the plunger and tank-wall passes to the upper side of the valve and stands quiescent there. In operation this is insignificant. The operation may be repeated until the tank is emptied.

D is a removable waste-water receiver. By the use of my device no packing of piston or stems is required and no moving mechanism, except the displacement-plunger, connecting-rods, and levers for actuating the same, all of which by the arrangement are concealed be-

low the top or slab of the casing which may be hinged or otherwise made removable for access to the basin, and that the tank may be filled or cleaned through its then open top or
5 be removed entirely.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

10 In a wash-stand, the combination of an outer casing, a basin supported in the upper part of the casing, a water-supply tank having its bottom below the level of the basin and its upper end extended nearly to the top of the casing, a pipe connecting the lower end
15 of the said tank with the basin, a displacement-plunger fitting the tank-walls and having in its lower end an opening for the passage of water downward through said plun-

ger into the tank, a valve located beneath said opening, a bail attached to the plunger 20 above said opening, a rod pivotally connected with said bail, and a two-armed horizontal hand-lever fulcrumed below the plane of the casing and above the level of the basin, one arm of said lever being pivotally connected 25 with the plunger-rod, which is thus controlled in its motion always below the horizontal plane of the top of the casing, substantially as described.

In witness whereof I have hereunto set my 30 hand and seal in the presence of two witnesses.

JOSEPH PENNEY. [L. S.]

Witnesses:

GEORGE CLAPPERTON,
HARRY P. VAN WAGNER.