

(No Model.)

C. R. PRICE.
CUSPIDOR.

No. 486,892.

Patented Nov. 29, 1892.

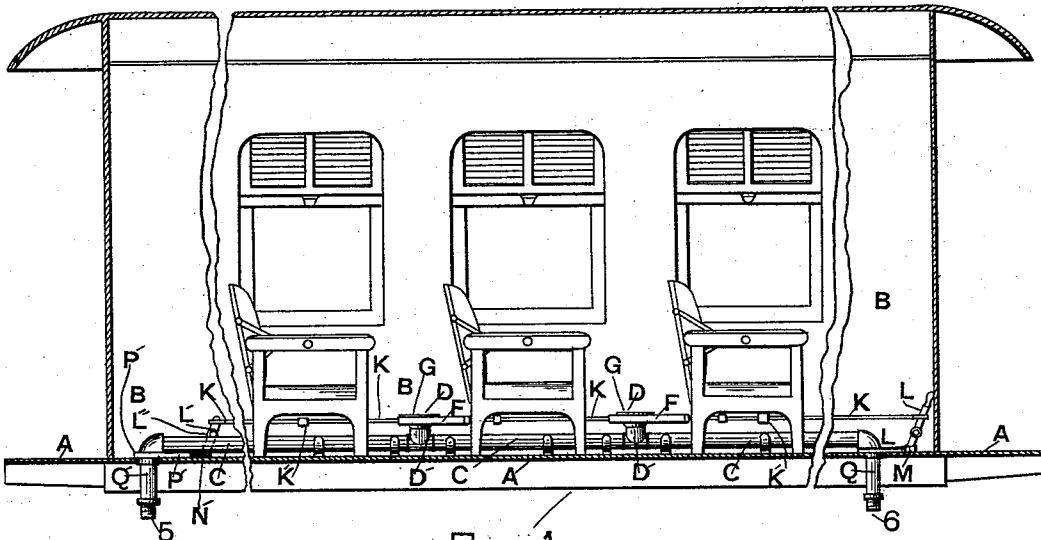


Fig. 1

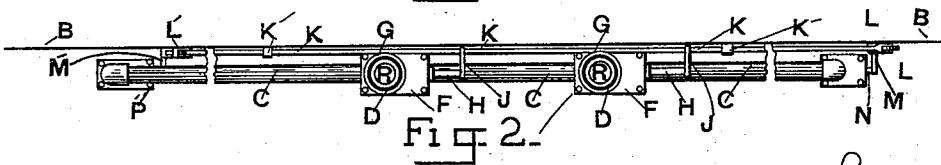


Fig. 2

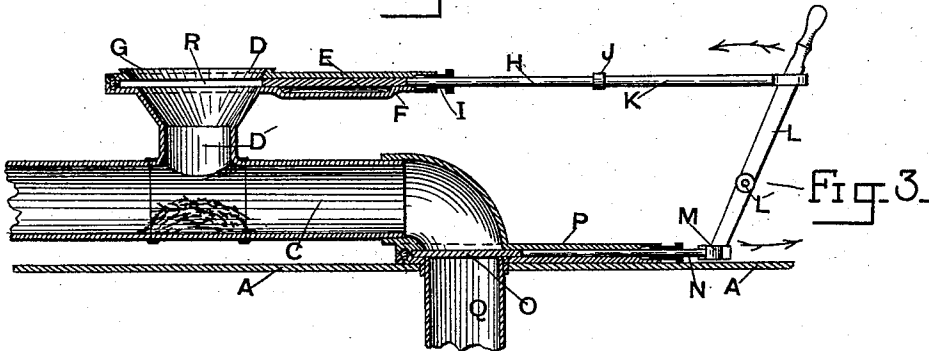


Fig. 3

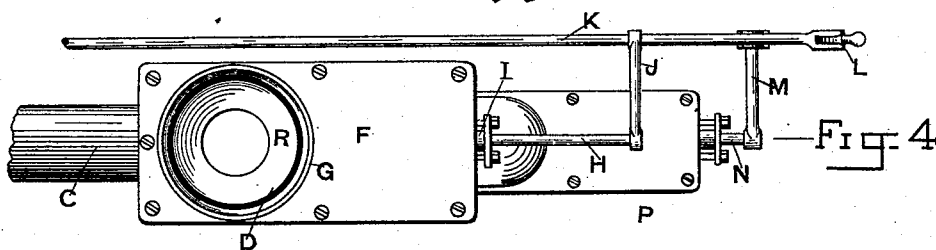


Fig. 4

WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

COURTLEON R. PRICE, OF PRESCOTT, WISCONSIN.

CUSPIDOR.

SPECIFICATION forming part of Letters Patent No. 486,892, dated November 29, 1892.

Application filed June 3, 1892. Serial No. 435,370. (No model.)

To all whom it may concern:

Be it known that I, COURTLEON R. PRICE, a citizen of the United States, residing at Prescott, in the county of Pierce and State of Wisconsin, have invented a new and useful Cuspidor, of which the following is a specification.

My invention relates to cuspidors, and my objects are to substitute for the ordinary cuspidors in use in railway-cars, steamboats, hotels, &c., a new system in which a number of cuspidors are connected together by a pipe, through which water may be admitted and all the cuspidors in a connected series be flushed out by water under pressure, and thus avoid the unpleasant duty and consequent loss from breakage incident to the use of utensils of this kind of the ordinary form. Another object is to provide means in my new system whereby unskilled help can manipulate the mechanism without danger of injury to furniture or carpets during the operation of flushing, all of which is illustrated in the accompanying drawings, in which—

Figure 1 shows an elevation of a portion of one side of the inside of a railway-car together with my new system of cuspidors in position for use. Fig. 2 is a plan view of the cuspidors and connections separated from Fig. 1. Fig. 3 is a vertical section of one end of my system, showing the slide-valves and means for operating the same, also relative positions of valves when cuspidor is open for use. Fig. 4 is a plan of Fig. 3, showing outside view and manner of connecting the means for operating the slide-valves.

Similar letters and numerals refer to like parts throughout the several views.

In this instance I have shown the application of my system of cuspidors to a railway-car, for the reason that the system can be very easily applied to this purpose, and on account of the perfect adaptation to this use can be much easier explained.

In the drawings, A is the floor of the car, and B one side thereof. Close in the corner at the floor of the car at both sides is a pipe or pipes C, which connect all in one series a number of hoppers D, which serve as cuspidors, a cuspidor of this kind being placed between the seats, as shown in Fig. 1. These cuspidors can be made of a T-castings similar

to an ordinary gas or water pipe T connection turned top downward. The hoppers D are secured to the stem, Fig. 1, with pipes C to connect the several T's together, or the pipes C can be one pipe extending the whole length of the car with the hoppers D secured to the pipe by a neck in any ordinary manner, so that anything thrown into the hopper will fall into the pipe C. At each end each series of cuspidor-pipes C terminates in a union-coupling 5 and 6, to each of which a hose can be attached for the purpose, as will be explained hereinafter. It is intended to flush out the pipe C by means of water under pressure above what would be attained by pouring water into the hoppers D, and so it is necessary to provide valves for each of the openings at the hoppers D to prevent the water from egress at these points and the consequent injury to carpets, &c. The form of valve I have found to serve this purpose best consists of a flat plate slide-valve as thin as consistent with strength, and this valve is shown at E, Fig. 3, which is rectangular in shape, of about one-eighth of an inch in thickness, and operates horizontally through slots near the top of the hopper D, the valve when closed covering the entire opening of the hopper. When the valve is open, it has a position in a rectangular casing F at one side of the hopper D, which casing is water-tight and really forms the entire top of the hopper, the annular rim at G being a part of the cover of the rectangular valve box or casing F. The slide-valve E is connected to a valve-rod H, which rod passes out through a stuffing-box I and is then connected to an arm J, which arm is attached to a long rod K, which rod is supported in brackets K' at the side of the car and runs the whole length from the first to the last cuspidor in a series. This rod K is pivoted to a lever L, which lever is pivoted to the side of the car at L'. The valve-rod H of each cuspidor is attached to an arm J, which arm is attached at its opposite end to the long rod K, so that by a motion of lever L all the valves can be moved simultaneously. Lever L extends downward and is pivotally connected at its lower end to an arm M, which arm has its opposite end firmly secured to the end of the lower valve-rod N, which rod is connected with and operates the slide-valve

O, Fig. 3, which valve is provided with a water-tight casing P. It will be noticed in Figs. 1 and 2 that the extreme left-hand end of rod K is pivoted to a lever L', which lever is pivoted at its center of length to the side of the car at L'' in a similar manner described for lever L. The lower end of lever L' is pivotally attached to the end of a horizontal arm M', similar to M, the opposite end of this arm being firmly secured to the end of lower valve-rod N', which rod is attached to and operates a valve in casing P', this valve and casing being duplicates, if necessary, of the valve and casing shown at the right-hand end of Fig. 1, or in an enlarged view, Fig. 3, the valves and casing at each end of pipe C being for the same purpose, and it will be understood that they are both constructed similar to what is shown and described for Fig. 3.

It is obvious that if motion is given to the top of lever L in the direction of the arrow, slide-valve E, Fig. 3, will be moved forward and close the opening at R, which forms a cuspidor, and is connected by neck D' with the interior of pipe C, and this same movement of lever L will operate to pull out the lower valve (see arrow) and open the pipe Q to communication with pipe C. When the several parts are in the position shown in the drawings, the cuspidors are all open, since the valves E are all slid back into their casing F, so that anything thrown into the hoppers D will fall down into the space under neck D', which space may, as before stated, be a part of pipe C or a portion of a T-casting or any other shape with pipe C screwed into it without altering the intent of this invention.

This system for cuspidors is more especially intended for railway-cars to give facility for cleaning, which operation I will now describe.

In the operation of flushing-pipe C a hose is connected to the coupling b at the lower end of vertical pipe Q and lever L is thrown forward in the direction of the arrow near the top to the position shown by the dotted lines, which movement closes valve E at the top rim G of all the cuspidors and simultaneously opens valves O at each end of pipe C. If water is now turned on through the hose, it will flow up pipe Q, thence along pipe C, carrying with it all loose material which

may have been thrown into the pipe through necks D', the water flowing to the opposite end of pipe C, thence down pipe Q' to the ground or into another piece of hose to the sewer. Should the waste material thrown into the cuspidors adhere to the inside of necks D' or pipe C, a strong pressure and high velocity of water can be admitted, which will soon carry away all waste matter, the valves E effectually preventing water from leaking out over the rim G of the cuspidors. The hose for flushing can be attached to either coupling 5 or 6, as may be found convenient. A current of water through pipe C and the several cuspidors can thus be admitted in either direction. After flushing the cuspidors the lever L is moved from the position shown in the dotted lines to the position shown in the solid lines, Figs. 1 and 3, when the valve E in all the cuspidors will be open and valve O closed and the system be again ready for use. In practice the valves O can be dispensed with in some instances, these valves O being for the purpose of preventing air from circulating up through pipe C and into the apartment in which the cuspidors are placed.

I claim as my invention—

1. A cuspidor comprising a combined repository and flushing-pipe C, hoppers G, attached to and in communication with said pipe, as shown and described, sliding valves for closing the mouths of said hoppers, said valves connected in series to open or close the mouths of said hoppers simultaneously, substantially as described.

2. A cuspidor comprising a combined repository and flushing-pipe C, hoppers G, attached to and in communication with said pipe, as shown and described, sliding valves E, capable of closing the mouths of said hoppers, and sliding valves O, guarding the terminal openings of said flushing-pipe and operating in combination with and in an opposite direction to said valves E, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 12th day of May, 1892, in the presence of two witnesses.

COURTLEON R. PRICE.

Witnesses:

CHARLES STEWART,
OSCAR SNELL.