

James L Howard.
Urinal.

[51.]

No. 119,147.

Patented Sep. 19, 1871.
Fig. 1.

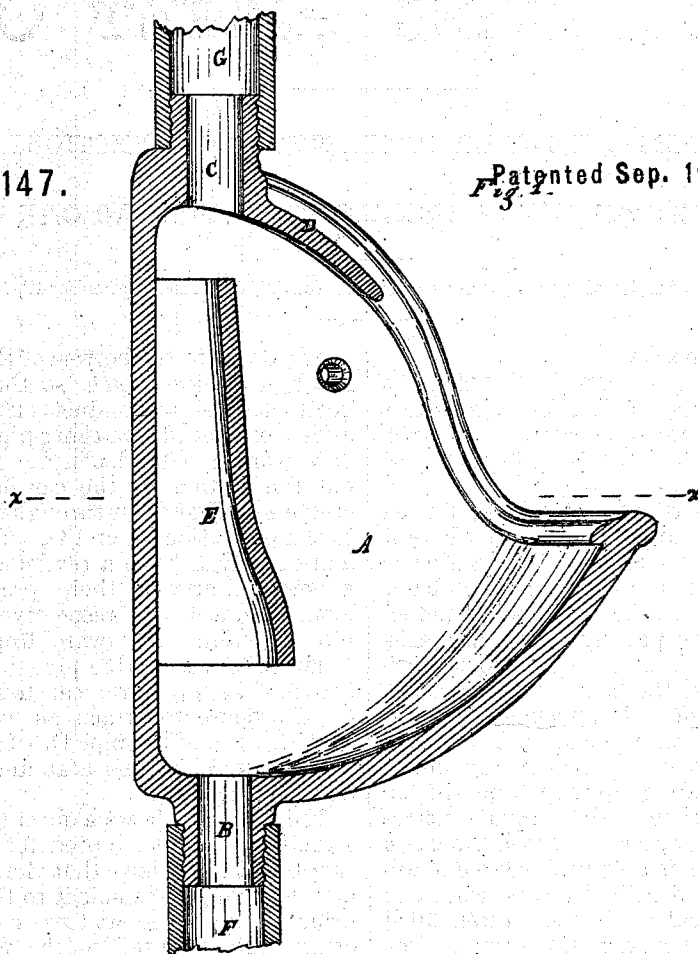
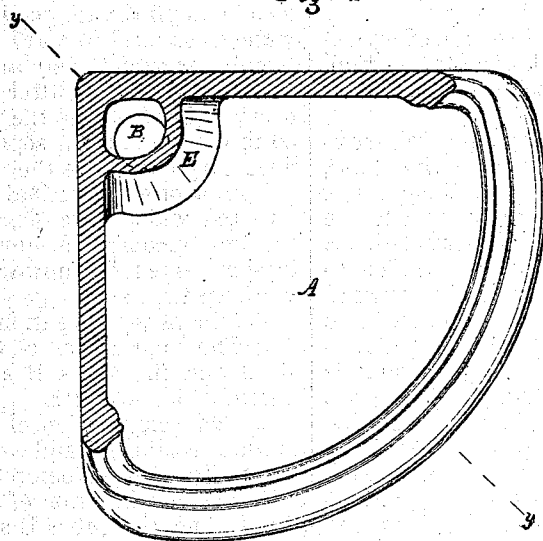


Fig. 2.



Witnesses.

Wm. D. D. D.
L. H. H.

James L. Howard
By *Wm. D. D. D.*
Atty

UNITED STATES PATENT OFFICE.

JAMES L. HOWARD, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN URINALS FOR RAILROAD CARS.

Specification forming part of Letters Patent No. 119,147, dated September 19, 1871.

To all whom it may concern:

Be it known that I, JAMES L. HOWARD, of Hartford, in the county of Hartford, and State of Connecticut, have invented certain Improvements in Urinals, of which the following is a specification:

This invention is particularly designed for use on railroad cars and any other place where it is impracticable to obtain a supply of water to purify the urinal-basin and the pipe which leads from it; but it may also be used with good effect in fixed urinals, to prevent any stench arising from the urinal from a neglect to turn on the water and cleanse the basin. The object of this invention is to provide an efficient means of ventilating the urinal basin and the discharge-pipe below, so as to carry off any stench through a pipe extending upward from the basin. The stench arising from urinals where there is no supply of water to cleanse the basin after each use thereof is a fruitful source of annoyance, especially on railroad cars, where, in warm weather, the saloon is very often filled with the stench arising from the urinal. The nature of my invention consists in the devices hereinafter described, by which the odors are gathered into a pipe extending upward from the basin, and thus carried out of the car, as hereinafter more fully set forth.

Figure 1 is a vertical central section of my improved urinal. Fig. 2 is a horizontal section, showing the parts which lie below the line *xx* of Fig. 1.

A is a urinal-basin having the general external form usually given to basins of this class, designed for use on railroad cars, though any other form may be given to it to adapt it to use in any place for which it may be intended. B is a hollow downward projection, intended to receive the discharge-pipe. C is an upward hollow projection from the top of the basin, to receive the ventilating-pipe extending downward to carry off the effluvia from the basin. D is a hood at the top of the basin, to gather the effluvia and carry it into the tube C and the pipe attached to it. E is a flue, which, as well as the hood D, I prefer to form with and make a part of the basin A. This flue is open both at the top and bottom, as shown in Fig. 1, for the purpose of gathering the effluvia in the lower part of the basin and allowing that gathered by the hood D to pass into the pipe extending upward from the tube C. It extends, however,

nearly down to the bottom of the basin and very nearly up to the tube C, so that it forms a very good channel to conduct off the odors which arise from the discharging-pipe, which extends downward from the basin A. Not only the heat, but the motion of the car has a tendency to create a current of air through the pipes attached to the projections B and C, and both the hood D and the flue E have a tendency to gather these vapors and prevent their spreading into the saloon. F and G are, respectively, the discharge-pipe extending downward from the projections B, and the ventilating-pipe extending upward through the top of the car from the projections C. I propose to attach an exhausting-ventilator to the top of the pipe G, which will give force to the upward current of air and make the operation more perfect.

The drawing shows a form of basin and construction of parts adapted for use on a railroad car; but it is obvious that the form of the basin may be changed to suit it to the requisites of a urinal in any place, and the construction of the other parts adapted to the particular use for which they may be required. The invention is represented in the drawing as adapted to use where there is no supply of water to cleanse the basin after each use; but this invention may also be applied with good effect to urinals where water is so used to carry off any odors that may remain, or which may arise from a neglect to turn on the water after use, which very often occurs. In this case the pipe G may be extended into a flue, and a separate nozzle or tube is necessary to receive the water.

I am aware that urinal-basins have been constructed which were somewhat arched over at the top, uncombined, however, with a ventilating-pipe extending upward to carry off the effluvia from the basin.

I claim as my invention—

1. The combination of the flue E with the basin A and the tubes B and C, substantially as hereinbefore set forth.

2. The combination of the hood D, basin A, discharge-tube B, and ventilating-tube C, substantially as hereinbefore set forth.

3. The combination of the basin A, hood D, flue E, and the tubes B and C, substantially as hereinbefore set forth.

Witnesses: JAMES L. HOWARD.

GEORGE G. SELL,
G. F. DAVIS.

(51.)