

J. W. OSBORNE.
URINAL.

2 Sheets—Sheet 1.

No. 192,045.

Patented June 12, 1877

FIG. 1.

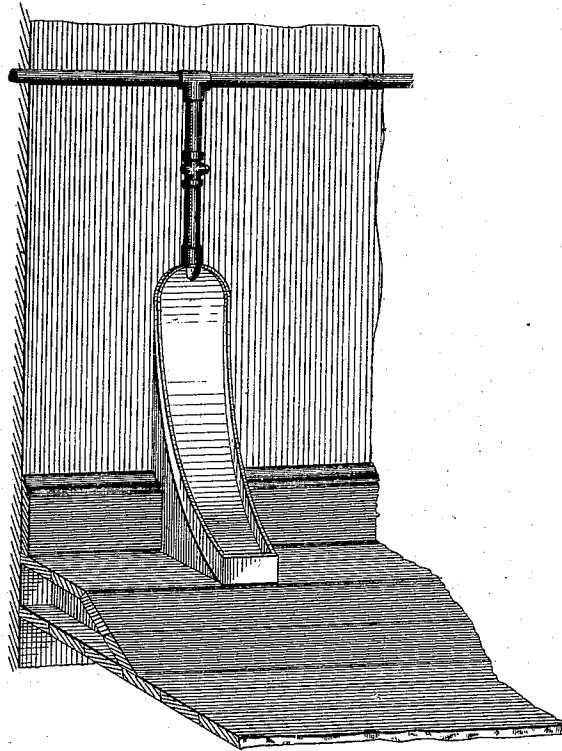


FIG. 2.

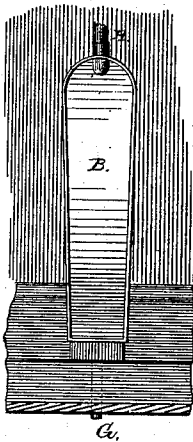


FIG. 3.

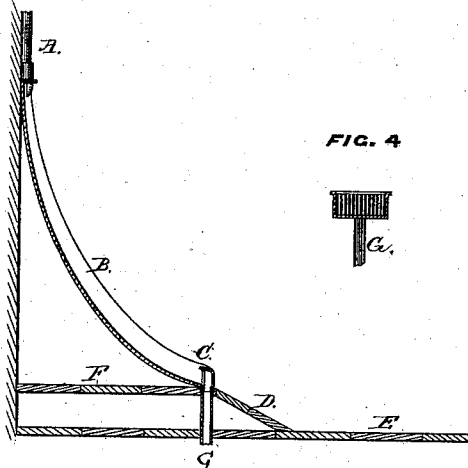


FIG. 4.



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FIG. 6

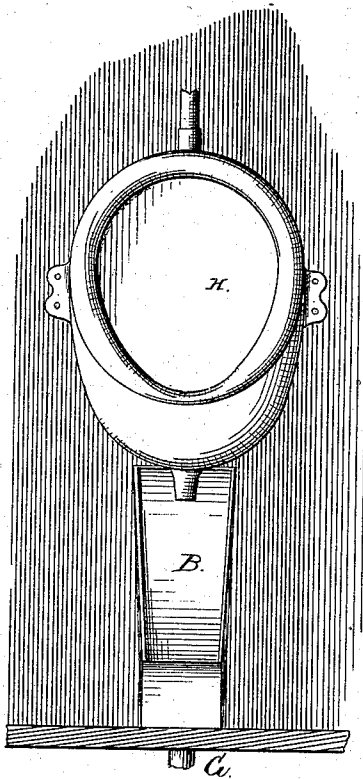
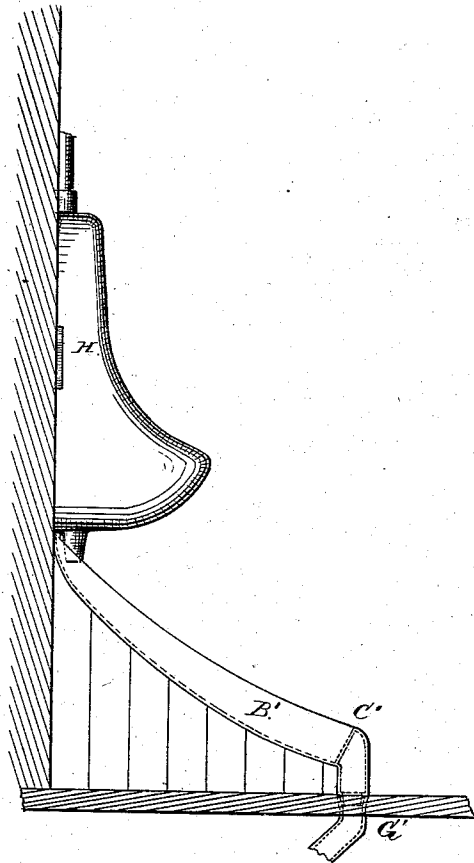


FIG. 5



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UNITED STATES PATENT OFFICE

JOHN WALTER OSBORNE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN URINALS.

Specification forming part of Letters Patent No. **192,045**, dated June 12, 1877; application filed March 15, 1877.

To all whom it may concern:

Be it known that I, JOHN WALTER OSBORNE, of the city of Washington, District of Columbia, have invented a new and useful Improvement in Urinals, which is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 represents the urinal shown in perspective; Fig. 2, a front elevation; Fig. 3, a perpendicular longitudinal section of the same; and Fig. 4, a perpendicular cross-section at the point C in Fig. 3. Figs. 5 and 6 represent a modification of my invention.

The object of my invention is to do away with the offensive smell which invariably pervades the places in which urinals are erected, by giving to these very necessary conveniences such a form as will remove the cause of the offensiveness referred to.

It will be found that when the usual forms of urinal are employed no disagreeable smell is or can be occasioned by the urine which mixes with the running water and with it is rapidly carried away, but that it is all due to the few drops which fall to the ground, and there decompose, disseminating ammoniacal and other noxious effluvia as a necessary consequence. This quantity is small for each individual, but becomes considerable when places of this kind are frequented by a number of persons, as in hotels, public offices, railway-depots, &c., and its decomposition is exceedingly rapid, as that portion which has already suffered change acts as a ferment for subsequent additions.

The present invention is such that the drip in question—which it is impossible to hinder by any expedient—is caught in the stream of water running through the urinal, and so carried off, and this is accomplished without requiring any special care, attention, or effort on the part of the user.

In Figs. 2 and 3 the urinal is shown in front elevation and in section. It consists of a plate or back, B, which is preferably wider at the top than at the bottom, bent to a convenient sweep or inclined so as to prevent spattering when the downward stream of urine is projected against it, and at the same time to cause the lower part to extend a suitable distance from the perpendicular. This may have

a flat, hollow, or corrugated surface, and is provided with raised edges at its sides to confine the water flowing over it. Such a urinal may be made of any suitable material, as earthenware, enameled or galvanized iron, &c. The water may be introduced above by the pipe A, and distributed over the surface of the plate in any convenient manner. At the lower end a large waste-pipe, G, is attached, before which a grating, C, shown in Fig. 4, is placed, to guard against stoppage of the pipe by the entrance of solid substances which may accidentally get there.

A person using this arrangement will naturally place his feet on either side of the lower part, without doing which he cannot get close enough to be agreeable, and it will follow as an inevitable consequence that the drip will fall into the running water and be carried off. Every trace of urine being thus removed, there can be no smell.

As shown in the drawing, this urinal may be supported against the wall of a room, and used singly, or several of them may be grouped together and separated by partitions or screens in a manner frequently followed in public places. By preference, I place them on a small platform, F, elevated six or eight inches from the level of the floor, E, and sloping down to it, in the manner indicated at D, Fig. 3. As no person will find it convenient to stand upon such an incline, this arrangement will compel the assumption of the proper position.

In certain public places, where cleanliness is so difficult to maintain that it becomes almost impracticable, this invention may be used with advantage by women, in which case (although the same general form will answer for both sexes) it may be found well to slightly extend the lower part of the urinal, or to modify the sweep of the curve shown in the drawing, with a view to their greater convenience.

In places where urinals of the common basin form have already been erected, and it is for some reason thought unadvisable to remove them, it is possible, without departing from the spirit of my invention, to apply a modification of the device hereinbefore described. In such cases, the contrivance I

have originated is placed under the basin and projecting downward and outward from and beyond it, so as to catch the drip. It must, of course, be supplied with water, either directly from the service-pipe or from the waste water of the basin, and must also be furnished with a waste-pipe of its own. Fig. 5 shows the application of the device in side, and Fig. 6 in front, elevation, the whole of the waste water from the basin, in the case illustrated, being carried over the attachment B', and passing off through the grating at C' to the waste-pipe G. By adopting this modification of my invention expense may often be saved, but the desirable result will not be obtained in as satisfactory a manner as when the simple and complete device shown in Fig. 1 is used. I do not, however, now claim this modification.

Having thus explained the nature of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a urinal,

consisting of the plate or back B, provided with raised edges, and inclined or curved downward and outward to the point C, over and across which the user can conveniently stand, furnished also with the service-pipe for water A, and the waste-pipe G, substantially as shown and described.

2. The method of insuring the catching of the drip, and thereby preventing the offensive odor which usually attends the use of urinals, by means of the incline and platform, so relatively arranged that the user of the urinal will preferably assume the position in relation to the trough which is necessary to secure the object set forth.

3. In combination with a urinal, the inclined surface D and platform F, arranged substantially as shown, and for the purpose described.

JOHN WALTER OSBORNE.

Witnesses:

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GEO. F. GRAHAM.