

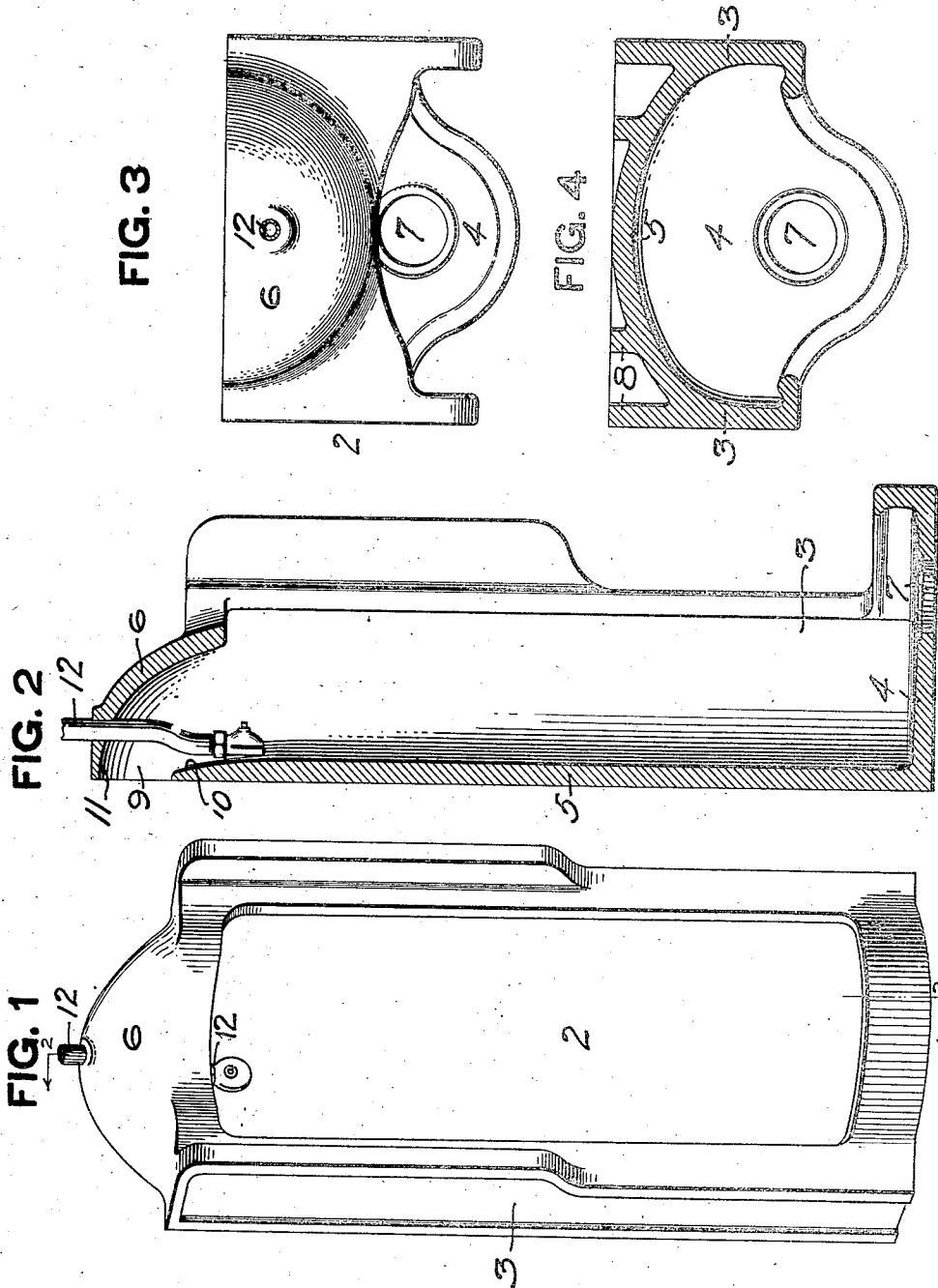
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URINAL.

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935,890.

Patented Oct. 5, 1909.



WITNESSES.

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UNITED STATES PATENT OFFICE.

OLIVER C. G. BRETTELL, OF WILKINSBURG, AND JOHN F. BAILEY, OF EDGEWOOD,
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URINAL.

935,890.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, OLIVER C. G. BRETTELL and JOHN F. BAILEY, residents of Wilkinsburg and Edgewood, respectively, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Urinals; and we do hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to urinals.

The object of our invention is to provide a urinal in which the odors and foul gases are drawn up and carried off at a height within the hooded or inclosed top of the urinal to insure the carrying-off of such odors and gases, while at the same time the vent is so situated with reference to the water spraying inlet as not to be interfered with in any manner in its capacity to carry off such gases.

To these ends our invention comprises the urinal features hereinafter set forth and claimed.

In the accompanying drawing Figure 1 is a perspective view of our improved urinal; Fig. 2 is a vertical section on the line 2-2 Fig. 1; Fig. 3 is a top view; Fig. 4 is a cross section.

The numeral 2 in the drawing designates the urinal which may be of any desired shape or size constructed of porcelain or of metal with enamel finish. The urinal comprises an upright box or shell having the sides 3, the bottom 4, the back wall 5 and the half-dome 6. The back-wall 5 is rounded as shown in Fig. 4, and the bottom 4 slopes toward the central discharge opening 7. This construction tends to direct all the fluid toward the central discharge, and there are no corners or recesses not directly acted on by the suction to draw off the foul gases, as hereinafter set forth.

The vertical ribs 8 serve to strengthen the back-wall and connect with the bottom 4. This gives a substantially rectangular frame which is easily set up and supported firmly in position.

The half-dome 6 forms an unobstructed cavity at the upper end of the urinal and the sloping walls of said dome converge from all points to the highest point therein and at this point the vent 9 is located. This vent is preferably formed in the back-wall and

being located at such a height all the foul gases are sure to be drawn off, while at the same time said vent is up out of sight where it is not in position to be urinated in or otherwise tampered with by malicious persons. The back-wall 5 is sloped off as at 10 adjacent to the vent so as to enlarge the throat in the dome leading to the vent, and likewise the top of the dome as at 11 tapers to less thickness than the main portion of said dome. This permits the vent being located at a higher point. The back wall being free from projecting parts from the bottom to the vent at the top there are no corners for the gases to lurk in, but they are all drawn up and carried away.

The water to flush the urinal is admitted by the pipe 12 at the top of the hood and the said pipe passes down in front of the vent 9 to discharge the water below said vent. In this way the flushing water does not interfere with the free and uninterrupted passage of the foul gases through the vent. The vent is never sealed by water and in no possible way can be made what is termed a "wet-vent."

As is customary in connection with urinals of this character some kind of a suction device is employed, such as a fan, or heat to create the draft to draw off the foul gases. When our improved urinal is in use the action of the suction device will be to draw up all the gases or odors arising from the urinal, and the vent being up within the hood the suction will be applied in a vertical direction and the converging inner faces of the dome will direct all such gases to the top of said dome where the vent is located. The water in spraying the urinal being admitted at a point below the vent in no way interferes with its free operation or prevents the escape of the gases.

What we claim is:

1. A urinal comprising a shell or box-like frame having an integral top in the form of a half-dome, a vent formed in the back-wall close to the top of said half-dome, the inner walls of said half-dome being curved and converging toward said vent, and the inner face of said back-wall being unobstructed from the bottom to said vent.

2. A urinal comprising a shell or box-like frame having an integral top in the form

of a half-dome, a vent formed directly in the back-wall close to the top of said half-dome, the inner face of said back-wall being unobstructed from the bottom to said vent, and
5 said back-wall and walls of said half-dome sloping toward said vent to enlarge the throat.

In testimony whereof, we the said OLIVER

C. G. BRETTELL and JOHN F. BAILEY have hereunto set our hands.

OLIVER C. G. BRETTELL.
JOHN F. BAILEY.

Witnesses:

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