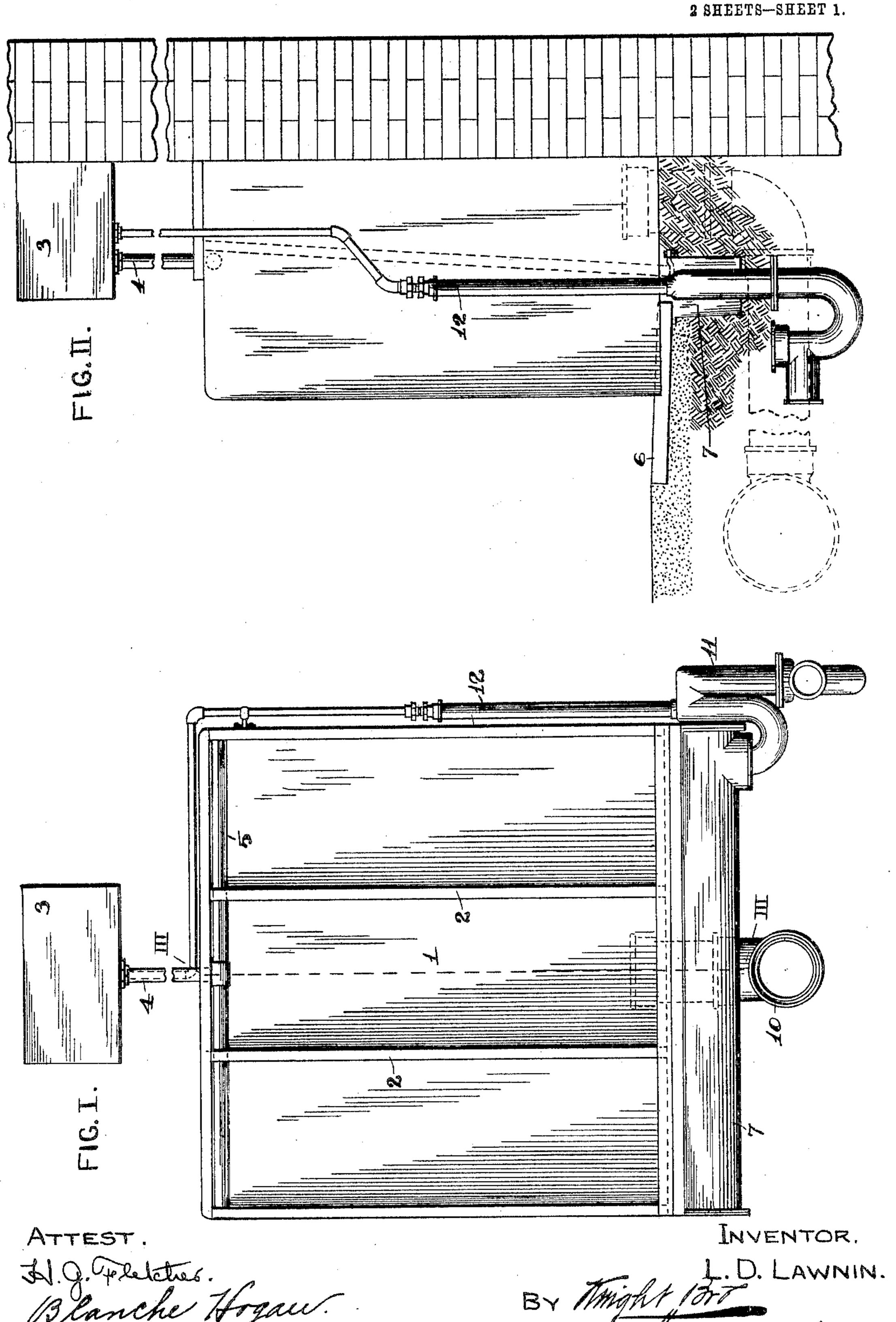
L. D. LAWNIN. URINAL.

APPLICATION FILED OUT. 24, 1904.

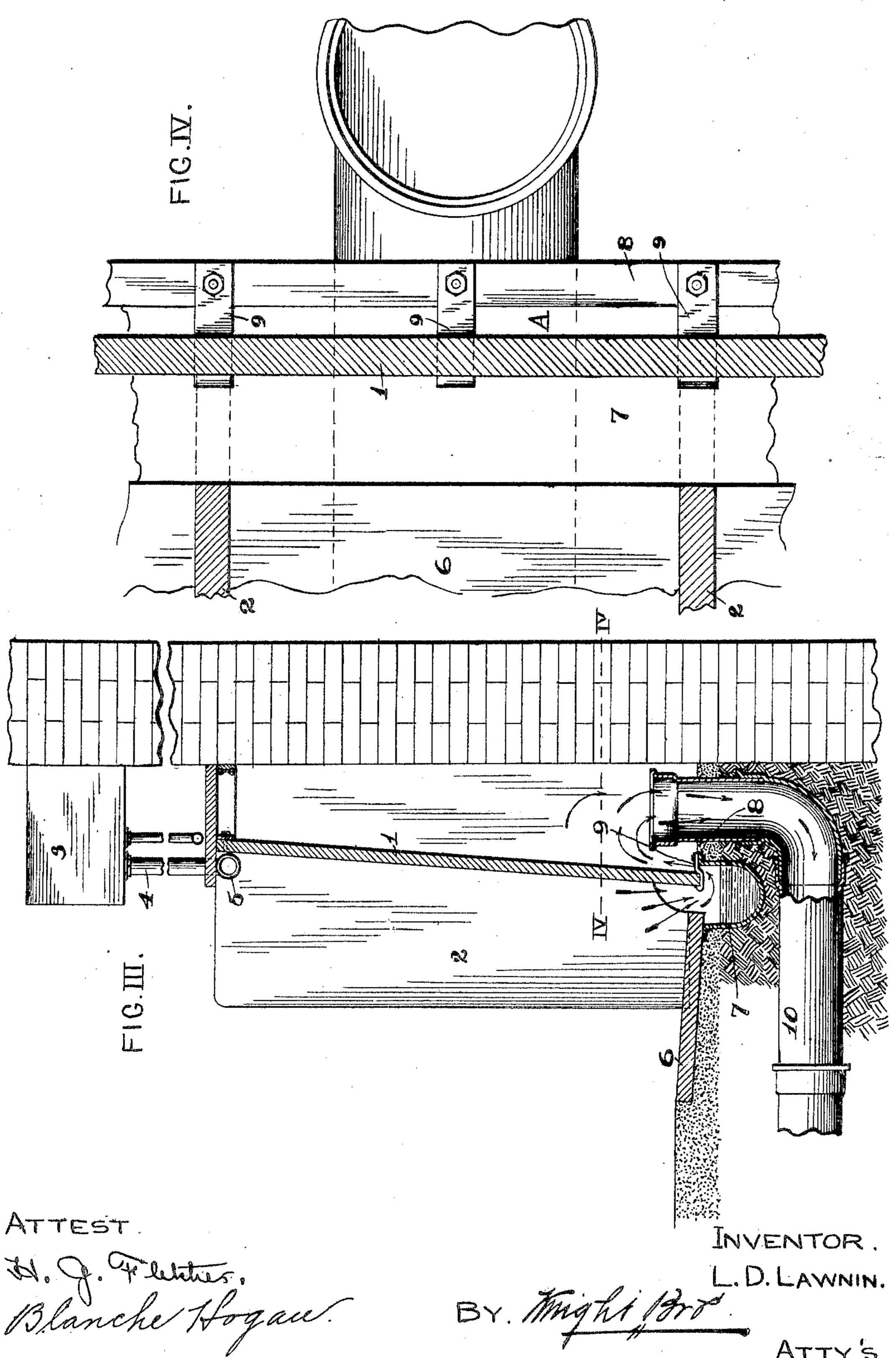


## L. D. LAWNIN.

URINAL.

APPLICATION FILED OCT. 24, 1904.

2 SHEETS-SHEET 2.



## UNITED STATES PATENT OFFICE.

LOUIS D. LAWNIN, OF EDWARDSVILLE, ILLINOIS, ASSIGNOR OF ONE-HALF TO N. O. NELSON MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

## URINAL.

No. 804,479.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed October 24, 1904. Serial No. 229,755.

To all whom it may concern:

Be it known that I, Louis D. Lawnin, a citizen of the United States, residing at Edwardsville, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Urinals, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of urinals used in public places and of the character illustrated in United States Letters Patent No. 659,446, issued to the N. O. Nelson Manufacturing Company October 9, 1900.

The object of the present improvement is to provide a more perfect ventilation of the gutter and apartments of the urinal for better sanitation, and, further, the provision of a simple means of support for the back supported by said gutter.

Figure I is a front elevation of my urinal. Fig. II is an end elevation. Fig. III is a vertical section taken on line III III, Fig. I. Fig. IV is an enlarged horizontal section taken on line IV IV, Fig. III, with parts beneath said line shown in plan view.

1 designates the back of my urinal, and 2 the partition-slabs that subdivide the urinal into stalls.

3 is an elevated water-tank, from which leads a water-conducting pipe 4, that is connected to a drip-pipe 5, located adjacent to and extending across the back of the urinal in the usual manner.

6 designates the floor-slab on which the

stall-partitions 2 are supported. 7 designates a gutter located partially beneath the back of the urinal and partially beneath the floor-slab 6, the said gutter being 40 provided with a rearwardly-extending flange 8. (See Figs. III and IV.) The back of the urinal extends downwardly to a position immediately above the gutter 7, but forward of its rear wall, thereby providing a space A be-45 tween the lower end of the urinal-back and the rear wall of the gutter, through which air may constantly circulate from the front side of the urinal-back to the rear side thereof, as indicated by the arrows, Fig. III. The 50 lower end of the back 1 is supported in the position stated by brackets 9, that are bolted or otherwise secured to the flange 8 at the

rear side of the gutter.

10 designates a vent-pipe that has open communication with the space at the rear of the 55 urinal-back 1 and into which the odor-laden air passing through the gutter 7 and beneath and to the rear of the back 1 enters after it has reached the space at the back of the urinal. This vent-pipe extends horizontally be- 60 neath the level of the floor surrounding the urinal, and it projects upwardly in the form of an open L into space at the rear side of the stall-back, where it terminates above the level of the surrounding floor. By this arrange- 65 ment the main portion of the pipe is placed beneath the floor, while the upwardly-extending L or foul-air-receiving end terminates above the floor-level at a point which obviates all possibility of entrance of water into the 70 pipe in the event of the urinal-gutter overflowing due to the outlet therefrom becoming clogged.

A body of water is maintained in the gutter 7 and flushed therefrom at intervals 75 through the medium of a double trap 11, connected to the gutter and having connection with the water-tank 3 by an air-pipe 12, such as illustrated and described in the Letters Patent hereinbefore referred to.

I claim as my invention—

1. In a urinal, the combination of a gutter adapted to hold a body of water, a stall-back support above said gutter and free of contact therewith to provide an air-space leading from 85 the front of said stall-back to the rear side thereof adjacent to the gutter, and a vent-pipe extending horizontally beneath the level of the floor surrounding the urinal and terminating in an open L extending to a point 90 above the level of the surrounding floor and having communication with the space at the rear side of said stall-back, substantially as set forth.

2. In a urinal, the combination of a gutter 95 adapted to hold a body of water, brackets secured to said gutter and extending thereover, a stall-back supported by said brackets free of contact with the gutter to provide an air passage-way leading through the gutter from the front side of said stall-back to the rear side thereof, and a vent-pipe terminating in an open L extending from a point above the level of the floor surrounding the urinal and terminating in the space at the rear side of said stall-back and leading horizontally from

said L beneath said floor, substantially as set forth.

3. In a urinal, the combination of a gutter, a stall-back freely supported above the gutter and having its lower end spaced from the rear wall of the gutter to provide an air passage-way, and a vent-pipe extending horizontally beneath the floor surrounding the urinal and having an upturned end terminating above the level of the floor and in the space behind the stall-back, substantially as set forth.

4. In a urinal the combination of a floor, a gutter adapted to hold a body of water and located beneath said floor, a stall-back supported above the gutter and free of contact with the rear wall of the gutter, and an L-shaped vent-pipe terminating above the level of the floor to prevent entrance of water into the pipe, substantially as set forth.

LOUIS D. LAWNIN.

In presence of— George J. Lewis, Josephine C. Smith.