

(No Model.)

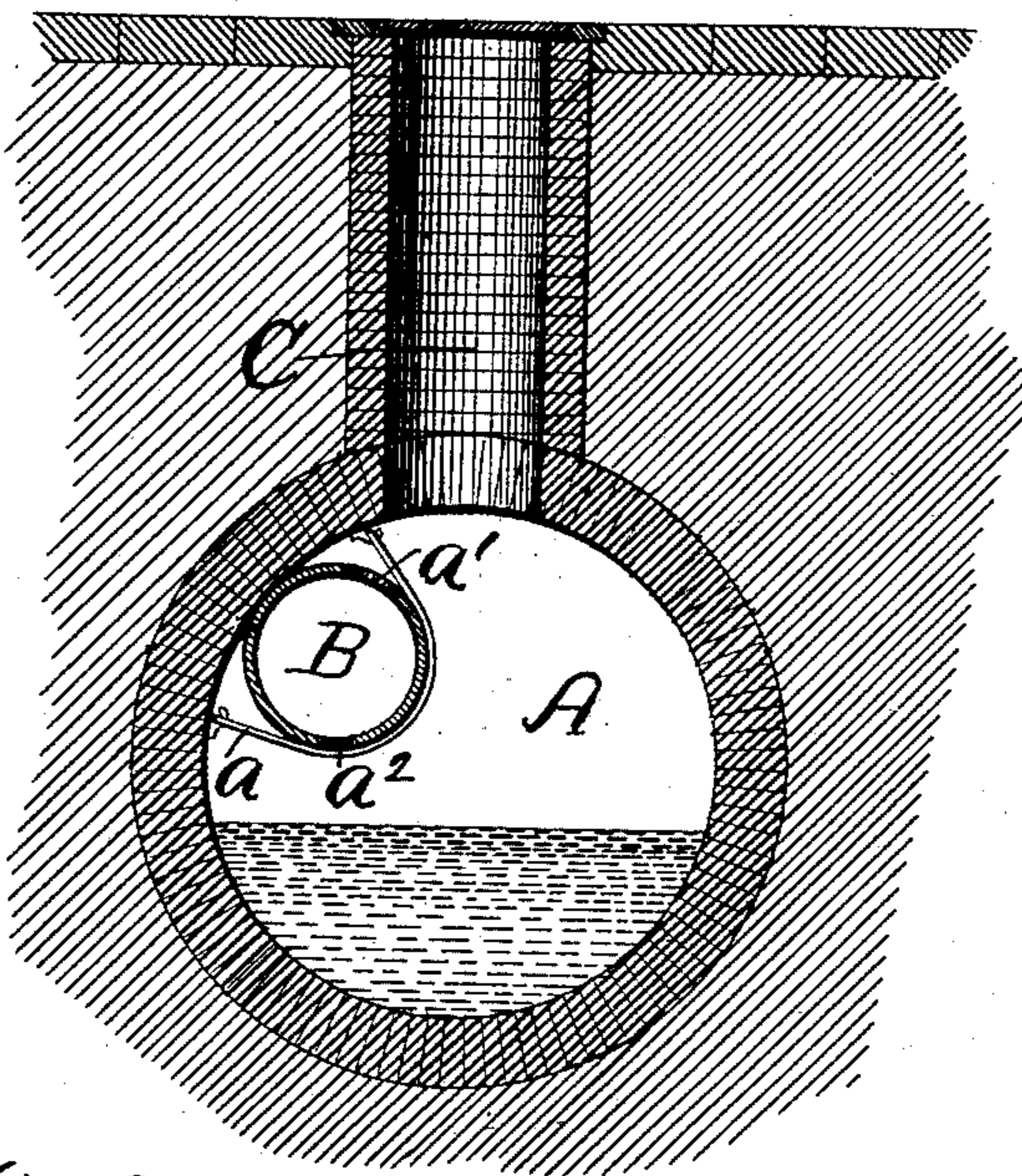
J. S. WILSON & W. W. GREEN.

MEANS FOR VENTILATING SEWERS.

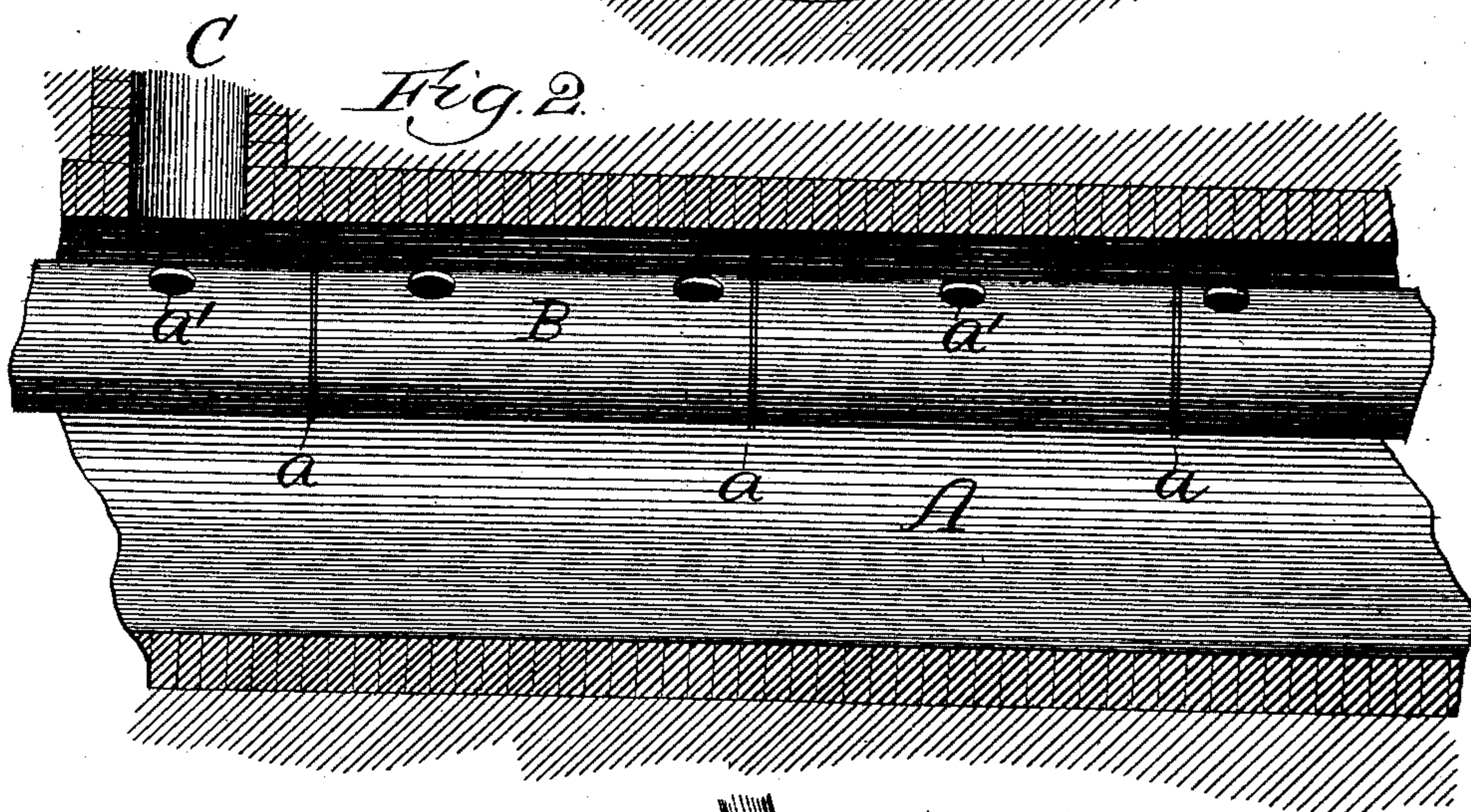
No. 328,168.

Patented Oct. 13, 1885.

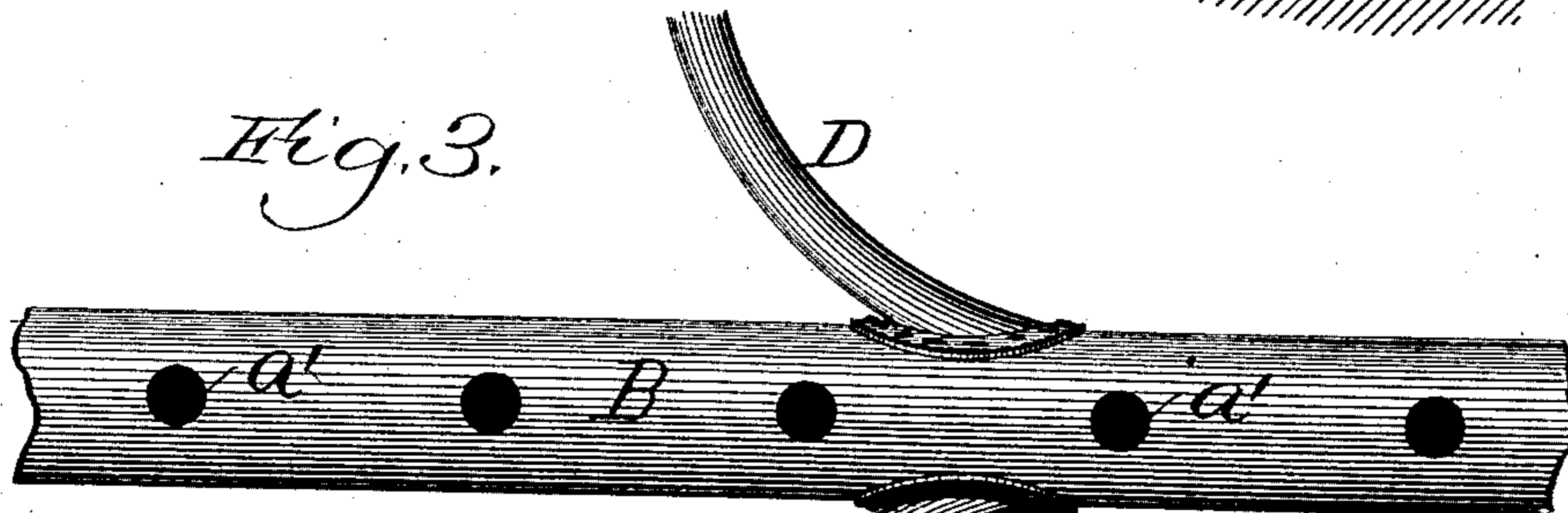
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
Chas. E. Gaylord  
V. Stanwood.

Inventors  
John S. Wilson.  
William W. Green.  
By G. B. Coupland & Co  
Attys.

# UNITED STATES PATENT OFFICE.

JOHN S. WILSON AND WILLIAM W. GREEN, OF CHICAGO, ILLINOIS.

## MEANS FOR VENTILATING SEWERS.

SPECIFICATION forming part of Letters Patent No. 328,168, dated October 13, 1885.

Application filed August 4, 1885. Serial No. 173,506. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN S. WILSON and WILLIAM W. GREEN, of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Means for Ventilating Sewers, of which the following is a full, clear, and exact description, that will enable others to understand and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this improvement is to provide a means whereby the foul gases generated in sewers may be expelled therefrom by being drawn off at some convenient point or points, and destroyed by being burned or otherwise disposed of, thus preventing the poisonous and deadly gases which prove so detrimental to health from entering the buildings, and also affording increased facilities for ventilation.

To this end the improvement consists in suspending or locating an auxiliary pipe on the inner upper side of the sewer-channel, through which the gases generated and the air admitted may be conducted.

Figure 1 is a transverse section of a sewer embodying our improved feature; Fig. 2, a longitudinal section, and Fig. 3 a plan of the auxiliary pipe.

Referring to the drawings, A represents the sewer; B, the auxiliary pipe located therein, and C a man-hole passage communicating with the sewer from the street-surface.

The pipe B will be usually located near the top and on one side of the channel, so as to ordinarily be above the water-line and at the same time out of the way, and avoid obstructing the passage, affording communication between the sewer and the surface. The pipe is secured in position relative to the sewer by the wire bands or straps *a*. Brackets, hangers, or any other suitable means may be employed for this purpose.

The upper side of the pipe B is provided

with the apertures *a'*, through which the gases are drawn from the sewer, and on the under side with a number of minute perforations, *a''*, through which any liquids may escape from the auxiliary pipe that might get into the same by reason of the same being flooded or from any other cause. The auxiliary pipe will run continuous with the sewer-channels, the smaller branch pipes D leading into the intersections of smaller sewers on cross or alternate streets. Now, by employing some mechanical device located near the terminus of the sewers which is capable of creating a strong suction, the foul gases are drawn off, thus producing and maintaining a continuous circulation, as the air will rush into the sewers through all the pipes and openings leading from the buildings into the same, thus not only preventing poisonous gases from entering buildings, but also provides improved means and facilities for ventilation.

The gases drawn from the sewers may be conducted into a furnace and destroyed by being burned, or led into a chimney and discharged from the same at a great height and mingled with the atmosphere.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a sewer-pipe, of an auxiliary perforated air-pipe suspended therein and running continuous therewith, substantially as and for the purpose set forth.

2. The combination, with a sewer-pipe, of an air-circulating and ventilating pipe located therein and provided with the apertures *a'* in the upper side, the perforations *a''* in the under side, and the branch pipes D, all substantially as and for the purpose described.

JOHN S. WILSON.

WILLIAM W. GREEN.

Witnesses:

J. B. DONALSON,

V. STANWOOD.