

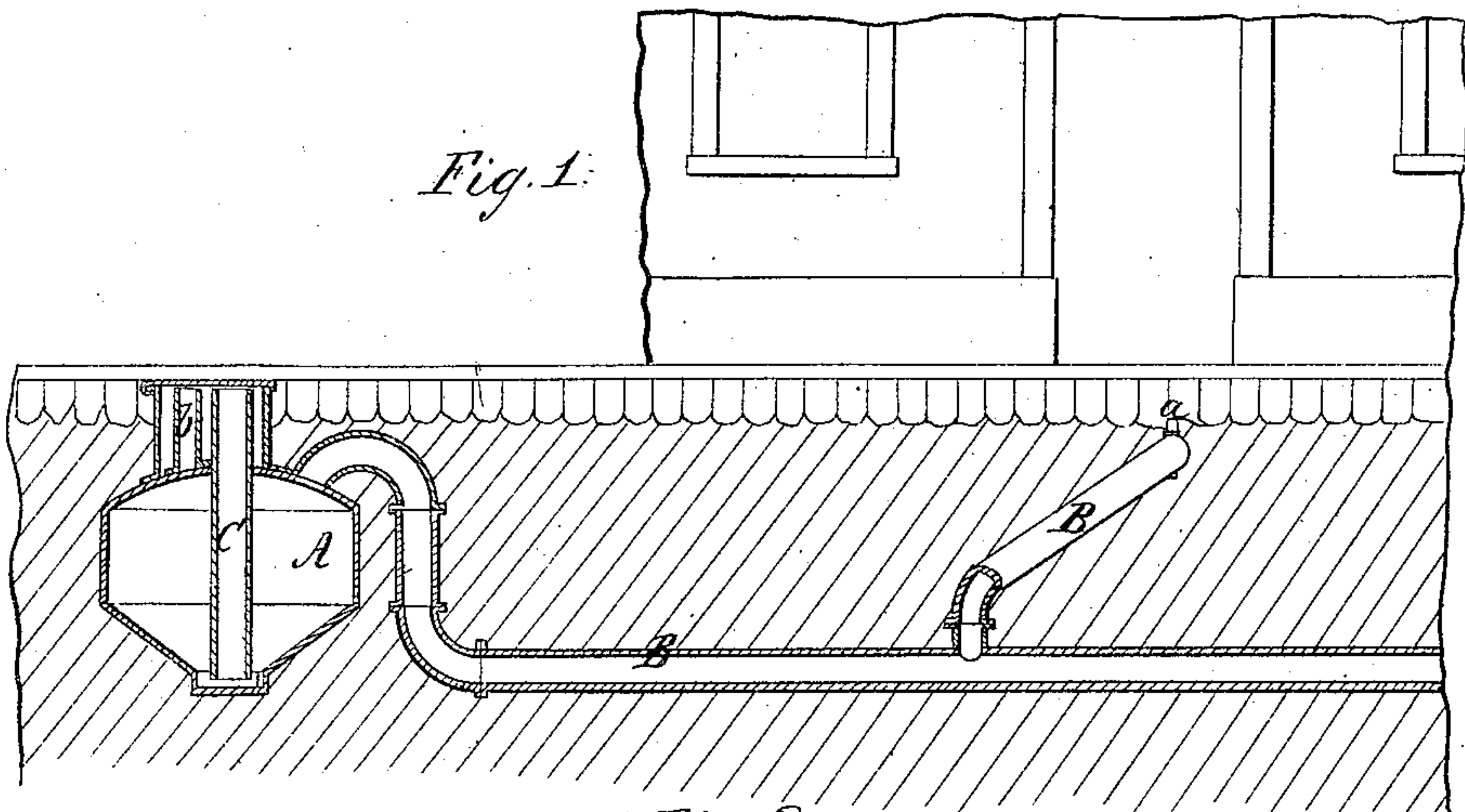
*G. T. Linnur*

*Sewer*

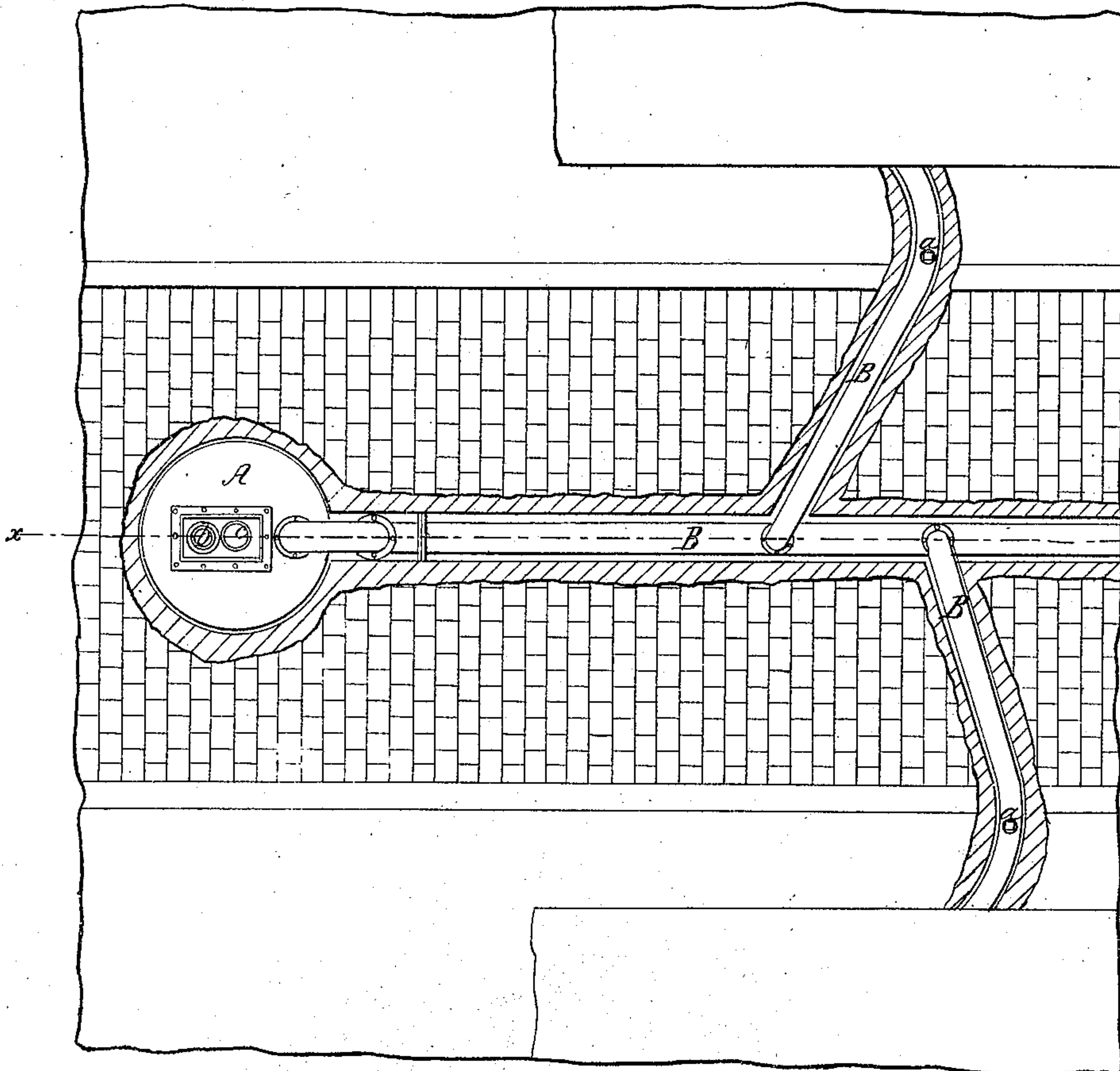
*Nº 61,842.*

*Patented Feb. 5, 1867.*

*Fig. 1.*



*Fig. 2.*



*Witnesses;*  
*Thos. Trach*  
*J. A. Service*

*Inventor;*  
*Geo. T. Linnur*  
*Per Wm. Linnur*  
*Attorney*

# United States Patent Office.

CHARLES T. LIERNUR, OF FRANKFORT-ON-THE-MAIN, GERMANY.

*Letters Patent No. 61,842, dated February 5, 1867.*

## IMPROVEMENT IN SEWERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES T. LIERNUR, of Frankfort-on-the-Main, Germany, have invented a new and useful Improvement in Pneumatic Sewerage; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate like parts.

The object of this invention is to empty privies and their pipes at any moment by connecting them with an air-tight reservoir sunk in the street, by means of pipes which are provided with stop-cocks, in such a manner that when all the stop-cocks are closed the air can be exhausted from said reservoir, and by opening one of the stop-cocks after the other the contents of the several privies are sucked into said reservoir without the least inconvenience from the emission of a bad odor.

A represents a reservoir which is made air-tight, of boiler iron or any other suitable material. From this reservoir extend pipes, B, to the privies or sinks in the surrounding buildings, and said pipes are provided with stop-cocks, *a*, so that the same can be opened and closed at any moment. The reservoir A is provided with a pipe, *b*, by means of which it can be connected with an air-pump, so that the air can be exhausted from said reservoir, provided the stop-cocks in the connecting pipes B are closed. If a privy or sink is to be emptied the stop-cock in the pipe connecting the same with the reservoir is opened, and the pressure of the atmosphere forces the contents of said sink or privy into the reservoir. By this operation all emission of a bad odor is avoided, and at the same time a current of fresh air is made to pass through said sink or privy, rendering the same clear and free from all bad odor.— If the reservoir is full, or whenever it is desired to empty the same, a similar inodorous process is employed, by connecting the pipe *c* with a pneumatic wagon. The pipe *c* passes down near to the bottom of the reservoir, and the pneumatic wagon is a well-known device, consisting of a strong tank which is carried through the streets on suitable wheels, and from which the air is exhausted either in a particular yard or by an air-pump attached to the tank and operated by the motion of the wheel or wheels which support said tank. By this arrangement the operation of cleaning privies or sinks and their pipes is rendered comparatively simple and easy. It can be effected without producing the least inconvenience to persons in the neighborhood, and after the first cost of erecting the requisite apparatus very little expense is created by the operation.

I claim as new, and desire to secure by Letters Patent—

The method herein described of cleaning privies, sinks, &c., consisting of an air-tight reservoir, A, sunk in the street and connecting with several privies and sinks by pipes, B, provided with stop-cocks *a*, substantially and for the purpose set forth.

CHARLES T. LIERNUR.

### Witnesses:

FREDERICK CHARLES KREPP, of Frankfort of Main.  
Professor Dr. AUG. BOLTZ, of Frankfort of Main.