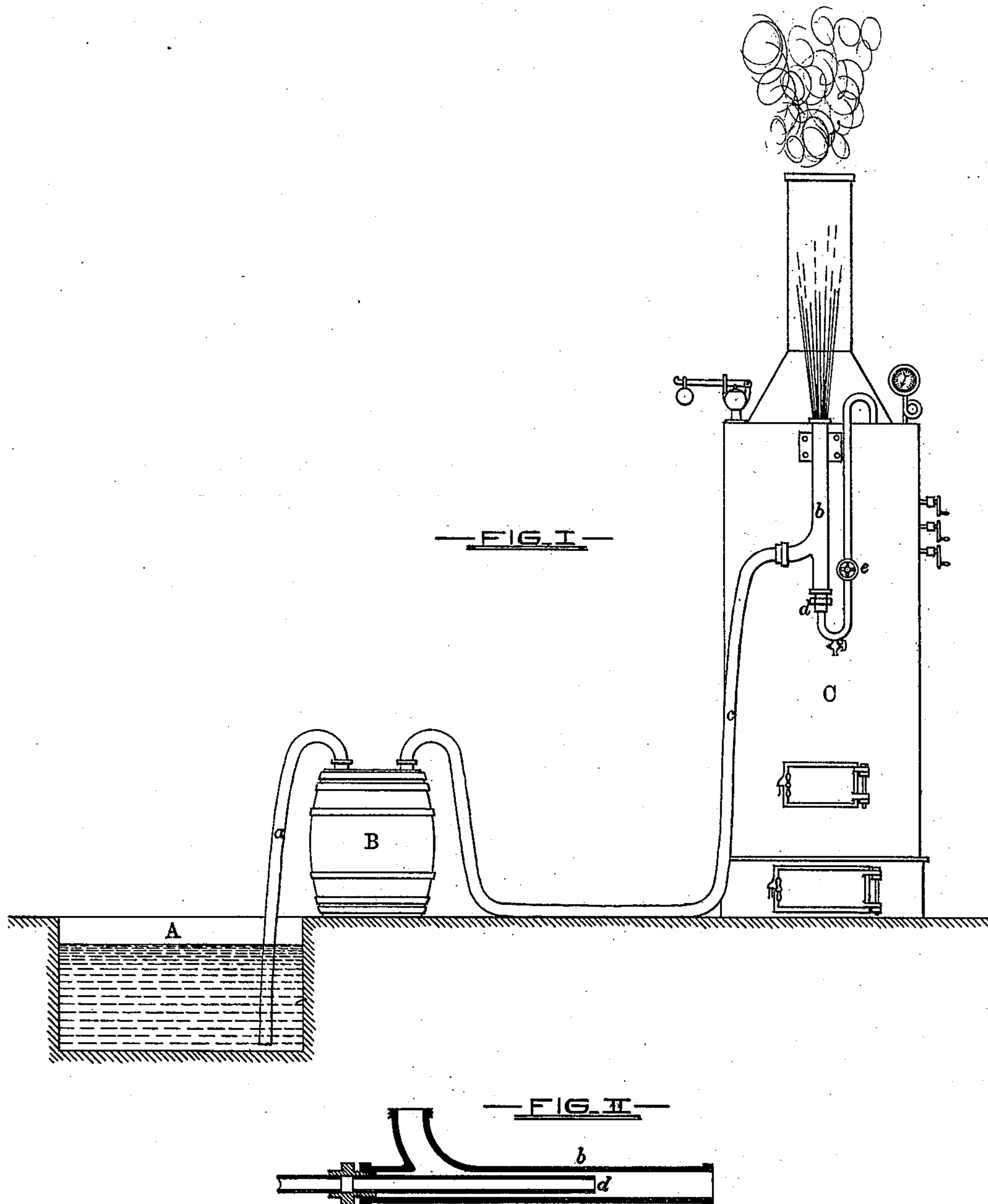


E. GETTMAN.

APPARATUS FOR EMPTYING SEWAGE-TANKS.

No. 193,504.

Patented July 24, 1877.



—WITNESSES.—

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UNITED STATES PATENT OFFICE.

EMIL GETTMAN, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN APPARATUS FOR EMPTYING SEWAGE-TANKS.

Specification forming part of Letters Patent No. 193,504, dated July 24, 1877; application filed June 13, 1877.

To all whom it may concern:

Be it known that I, EMIL GETTMAN, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Sink-Emptying Apparatus, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

This invention relates to certain improvements in that class of sink-emptying apparatus wherein the tank or barrel for holding the sewage matter is filled by exhausting the air therefrom, the said matter flowing to the tank or barrel under atmospheric pressure.

The said invention consists in combining with a steam-boiler, and a tank or barrel for holding sewage matter, an air-exhausting device consisting of an outer and an inner pipe, the former communicating with the interior of the tank by means of hose, and the latter with the steam-room of the boiler. The relative sizes of these pipes, and their positions with reference to each other, are such as to cause a partial vacuum in the outer pipe and tank connected thereto, upon the escape of steam from the inner pipe, as will hereinafter fully appear.

In the further description of my invention which follows, reference is made to the drawing forming a part hereof, and in which—

Figure 1 is an exterior view of the apparatus, and Fig. 2 an enlarged sectional view of parts of the same.

Similar letters of reference indicate similar parts of the invention in both figures.

A represents the sink, and B a barrel connected therewith by means of hose *a*. C is a steam-boiler of any suitable construction, to the outside of which is secured the air-exhausting pipe *b*. This pipe communicates with the interior of the barrel B, through the medium of hose *c*, and it is provided with an inner pipe, *d*, leading to the steam-room of the boiler. The pipe *b* with its attachments are not necessarily secured to the boiler, and may, if desired, have a separate stand, or be fastened to the barrel, but the construction shown is preferred. A valve, *e*, controls the current of steam issuing from the boiler. The upper end of the air-exhaust-

ing pipe *b* is open to admit of the escape of air and gases from the barrel, and steam from the pipe *d*, when the apparatus is in use.

The operation of the apparatus when the parts thereof occupy the positions shown in the drawing is as follows: Upon opening the valve *e*, steam escapes from the pipe *d* with considerable velocity, and the air in the upper part of the pipe *b* is thereby driven out, thus causing an exhausting-current of air from the barrel. By this means the pressure within the barrel is reduced, and the sewage matter rises in the hose *a*, and gradually fills the barrel.

One special advantage of my improved apparatus is that no deodorizer is necessary to neutralize the gases generated in the barrel during the filling operation, the said gases being carried with the exhaust steam to such altitude as to allow of their dilution by mingling with the surrounding atmosphere without giving offense.

I am aware that it is not new to establish a vacuum in a tank or receiver by means of a current of steam passing through a pipe attached thereto, and such air-exhausting devices I do not claim broadly; but

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a sewer-emptying apparatus, the combination of the steam-generator C with the steam-pipe *d*, valve *e*, and air-exhausting pipe *b*, provided with a nozzle for connection with the barrel-pipe *c*, substantially as specified.

2. A sink or sewer emptying apparatus consisting of the following elements in combination, to wit: A steam-generator, provided with an escape-pipe through which steam is liberated into the open air, and an air-exhausting pipe from which the air is exhausted by the said escape of steam, a base-pipe attached to said exhausting-pipe, and a barrel or tank provided with tubing for entering the sink or sewer, substantially as herein specified.

In testimony whereof I have hereunto subscribed my name this 22d day of May, in the year of our Lord 1877.

EMIL GETTMAN.

Witnesses:

W. W. WHARTON,
JNO. T. MADDOX.