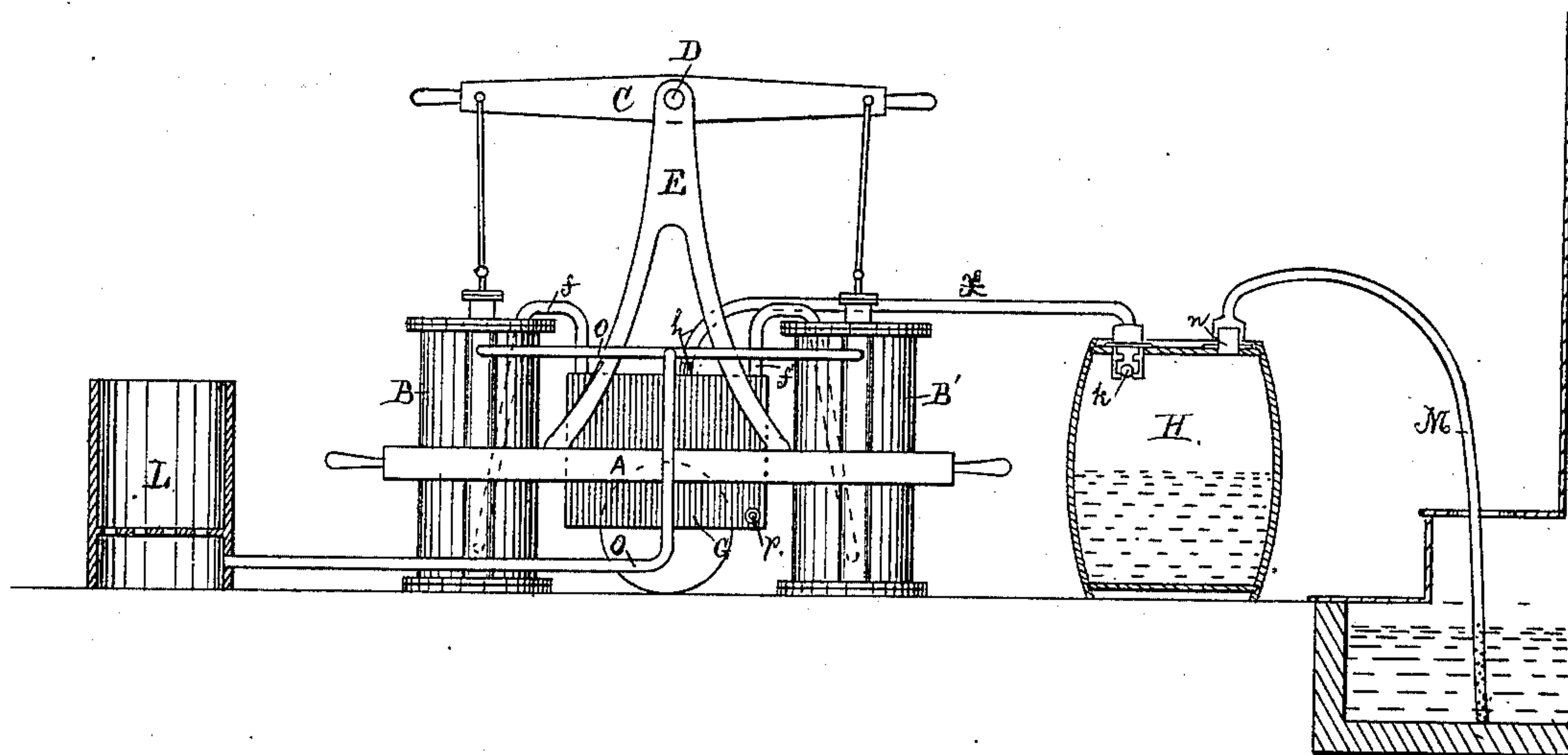


F. L. BACKHAUS.
Odorless Excavating Apparatus.

No. 232,229.

Patented Sept. 14, 1880.



WITNESSES.

Frank Wilson

Arthur Barber

INVENTOR.

F. L. Backhaus

H. N. Jenkins

ATTORNEY.

UNITED STATES PATENT OFFICE.

FREDERICK L. BACKHAUS, OF NEW ORLEANS, LOUISIANA.

ODORLESS EXCAVATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 232,229, dated September 14, 1880.

Application filed June 30, 1879.

To all whom it may concern:

Be it known that I, FREDERICK LOUIS BACKHAUS, a resident of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a certain new and useful Improvement in Apparatus for Cleaning Privies; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing, making a part of this specification.

This invention relates to certain improvements on the odorless system of cleaning privy-vaults; and the construction and operation of my invention will be readily understood by referring to the accompanying drawing, whereon—

A represents a frame, to which is secured a pair of pump-cylinders, B B', the plungers of which are operated by a beam, C, that is keyed or otherwise fitted to a rock-shaft, D, the latter supported by stands E E, as shown.

Between the pumps, and connected therewith by means of pipes *f f'*, is an air-tight vessel, G, which will retain any night-soil that might by accident or otherwise pass into the same, thereby keeping it out of the pumps. The top of the vessel is provided with a pipe, *h*, from which a connection is made by means of a flexible tube or hose, *x*, with an opening in the top of the receiving-cask H. The aforesaid opening is provided on its inner side with a float-valve, *k*, for automatically closing the same whenever the cask is filled.

M is a suction-pipe, through which the night-soil is conveyed into the cask H, through a second opening therein, as shown at *n*.

The pumps are each connected, by means of pipes *o*, with a deodorizer or furnace, L, in which charcoal or other fuel is burned, for the purpose of destroying the gases passing through the same.

The vessel G is provided near its bottom with a pipe, *p*, for the purpose of withdrawing any matter which by accident or carelessness may be forced into the same.

To provide for the filling of two casks at

one time, the aforesaid vessel G may be furnished with two inlet-pipes; or it can be divided into two compartments, each furnished with an inlet-pipe for the said purpose.

This apparatus, or any section thereof, may be placed near the vault or at a distance therefrom without in any manner interfering with its working.

In the operation of this invention a vacuum is first created in the vessel G, into which the gases from the cask H are subsequently drawn, and afterward forced, by means of the pump, into the deodorizer L.

I am aware of the patent granted to S. R. Scharf, No. 158,743, dated January 12, 1875, in which the contents of the vault are drawn into the tank by means of a vacuum produced by the pump, and the foul vapors pass from the tank into the pump, by which they are expelled into the deodorizer. In this case there is danger of the contents of the vault being drawn into the pump, thereby clogging the operation of the same. My invention differs essentially from this by arranging between the pumps an air-tight vessel to collect any matter that might possibly pass into the pumps.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an odorless excavating apparatus, the air-tight vessel G, arranged between the pumps, and connected with the same, as described, and for the purpose set forth.

2. The combination, in an odorless excavating apparatus, of the pumps B B', the air-tight vessel G, arranged between said pumps, the connecting-pipes *f, f', h, o*, and receiving-cask H, substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto signed my name.

FREDERICK LOUIS BACKHAUS.

In presence of—

H. F. BACKHAUS,
FRANK H. WILSON.