

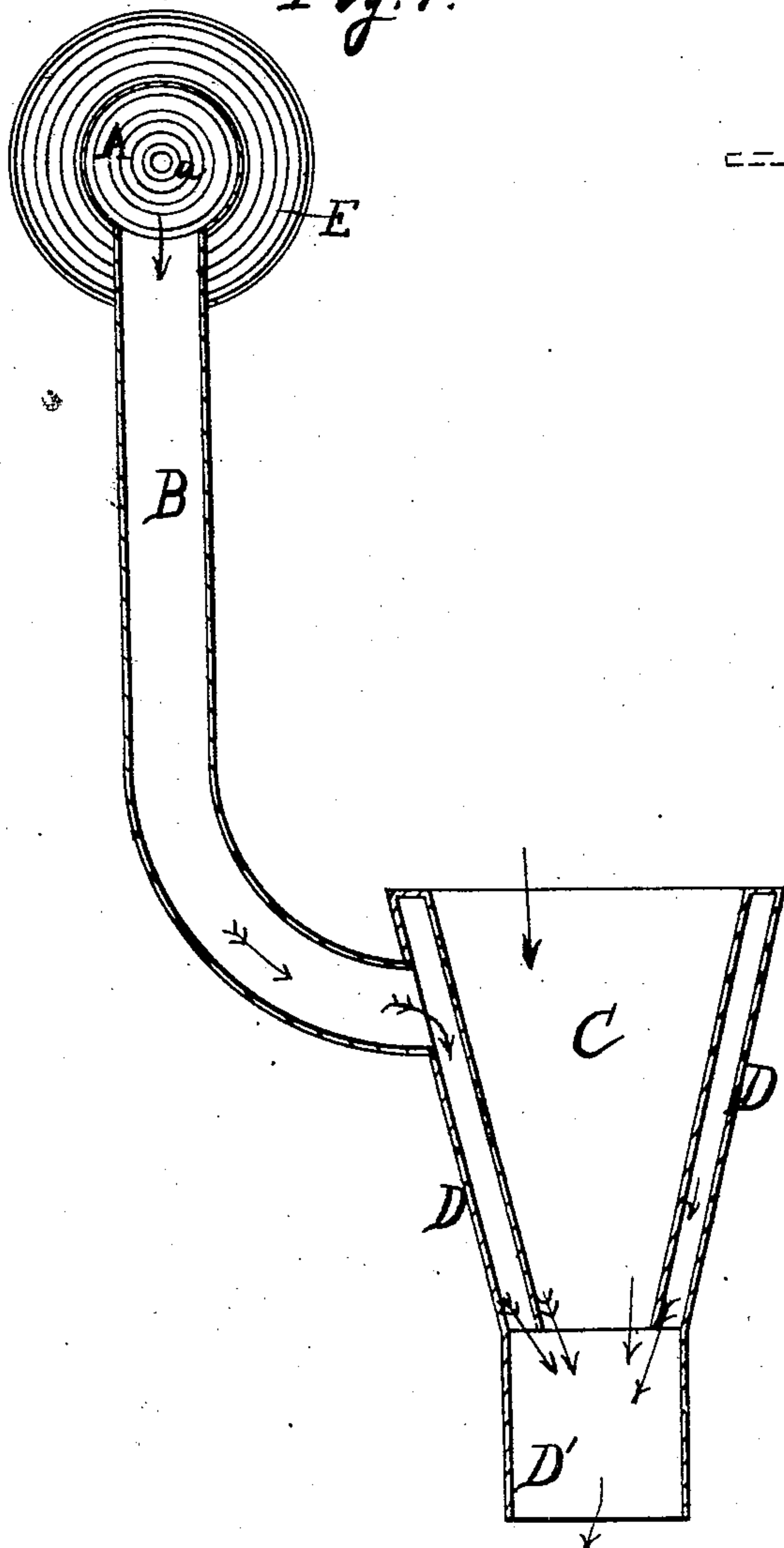
*F. Hainsworth*

*Ventilating Water Closets*

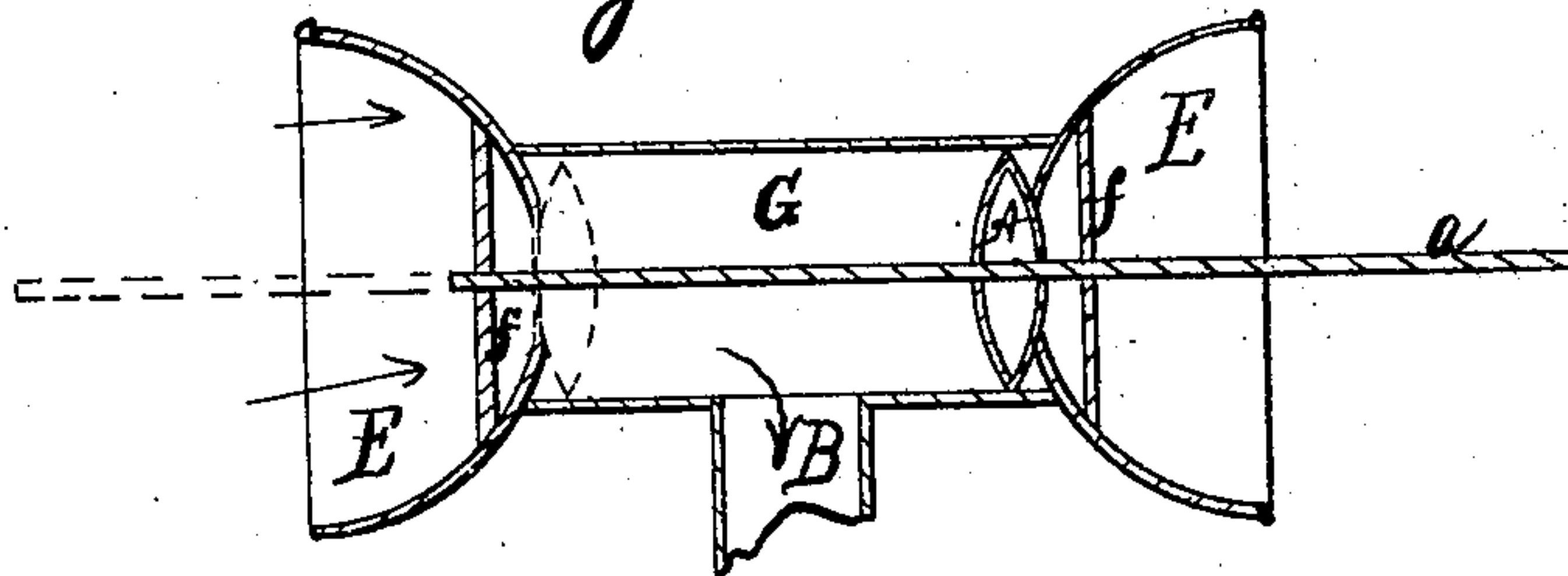
*Patented March 3 1868*

*No 75010*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*Charles Smith.*  
*C. H. Brown.*

*Inventor.*

*Frederick Hainsworth*

# United States Patent Office.

FREDERICK HAINSWORTH, OF CHICAGO, ILLINOIS.

*Letters Patent No. 75,010, dated March 3, 1868.*

## IMPROVEMENT IN APPARATUS FOR VENTILATING WATER-CLOSETS.

*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, FREDERICK HAINSWORTH, of Chicago, in Cook county, and State of Illinois, have invented a new and improved Method of Ventilating Privies or Water-Closets in Railway-Cars and Steamboats; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 represents a vertical central section of my invention.

Figure 2 represents a longitudinal section of the upper and weather portion of my ventilating-apparatus.

To enable those skilled in the art to make and use my invention, I will describe its construction and operation.

E E are stationary funnels, upon either end of chamber G, projected above the roof, and designed to face the ends of the cars or boats upon which this invention may be placed, in order that they may receive the pressure of air which is produced by the motion of the said cars or steamboats. A is a valve fitted loosely into the chamber G, and is guided and supported by the rod *a* and braces *f f*. When the pressure is received into the funnel, it communicates to the valve A, forcing said valve against the opposite funnel, and thus closing that passage, which causes the air to pass in full force down pipe B. D is an outer casing to the inner shell C, which forms the common privy-seat, with an annular passage surrounding for the downward currents of air. D' is a continuation for a short space of the casing D, for the purpose of continuing and giving momentum to the current of air forced down, which will cause the central column of air extending up through the shell C to be drawn down and passed off, as indicated by the arrows in fig. 1, thus keeping the atmosphere in the apartment above pure and healthful.

In the arrangement of the water-closets now in use upon cars and steamboats, there is much tendency towards a strong upward current of air into the apartment above, filling it with a villainous compound of foul smells stifling to most visitors. It has also been observed and experienced by most travellers in cars and steamers, that the cool air striking against the warm body of the individual, while answering the calls of nature, is very liable to produce a reaction, destroying for the time the desire and also the power to produce an action, thus predisposing the patient to constipation and its attendant evils; and delicate persons, especially ladies at critical periods, are thus needlessly and almost criminally exposed to the dangers of reaction by cold. It is a demonstrable fact that these inconveniences, difficulties, and dangers will be fully overcome by the use of my invention.

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

A water-closet ventilator, consisting of the case D, pipe B G, and valve A, substantially as described.

FREDERICK HAINSWORTH.

Witnesses:

CHAS. C. SMITH,  
F. H. BROWN.