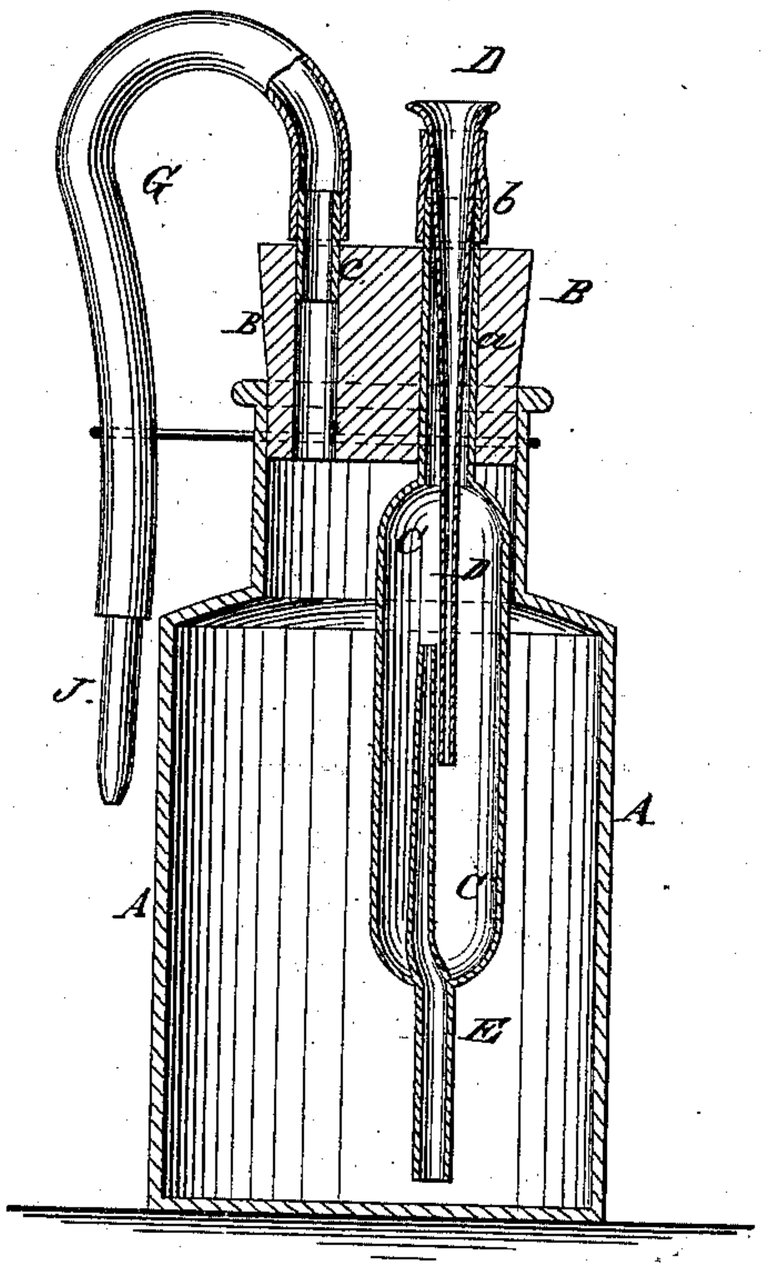
L. E. FELTON.

Inhaler.

No. 201,659. Patented March 26, 1878.




WITNESSES:

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# UNITED STATES PATENT OFFICE.

LUCIUS E. FELTON, OF POTSDAM, NEW YÖRK.

## IMPROVEMENT IN INHALERS.

Specification forming part of Letters Patent No. **201,659**, dated March 26, 1878; application filed September 14, 1877.

*To all whom it may concern:*

Be it known that I, LUCIUS E. FELTON, of Potsdam, in the county of St. Lawrence and State of New York, have invented a new and Improved Inhaler, of which the following is a specification:

This invention relates to inhalers which are used for relieving throat and lung diseases by the inhalation of vapors of different medical substances, such, for instance, as the vapor produced by drawing air over or through muriatic acid, and then through a solution of ammonia.

The nature of my invention and improvement consists in attaching to the stopple of a bottle an elongated acid-receiver and a flexible inhaling-tube, the said acid-receiver being provided with a packed filling funnel or tube, and also with an exhausting-tube, extended above the level of the acid and dipping down into the solution in the bottle, as will be hereinafter explained.

In the annexed drawing I have represented a diametrical section through the improved apparatus.

The letter A designates a bottle of any desired shape or size, having a mouth, in which is inserted a stopple, B, which I prefer to make of vulcanized rubber, although any other substances may be used.

C designates a glass acid-receiver, which is cylindrical, with rounded ends. The upper end of this cylinder has a tube, *a*, formed on it, which passes up through the stopple B, and has an india-rubber tube, *b*, stretched on its upper exposed end, which is designed to serve as a packing for a long feed-funnel, D, that is flaring at its upper end, and extended down deeply into the acid-vessel C. This feed-funnel not only serves the purpose of conducting the acid, but is adjustable in the packing, and capable of slight lateral movement, so that it will direct a current of air against or through the acid or chemical contained in the receiver, and serves, in connection with the packing, to prevent the escape of acid when tipped upon its side or inverted, and to prevent the escape of vapor when not in use.

The lower end of the acid-vessel C has formed on it a tube, E, which extends above the lower end of the tubular funnel D, and also extends nearly to the bottom of the bottle A, when the stopple is inserted into the mouth of the bottle. Diametrically opposite the feed-funnel D is a short glass tube, *c*, which is made fast into the stopple B, and on which is stretched an inhaling-tube, G, made of india-rubber, and provided with a glass mouth-piece, J.

The apparatus is used by charging the receiver C with acid, diluted or not, and supplying the bottle A with a solution of ammonia or other chemical. The mouth-piece of tube G is introduced into the mouth, and air drawn into the bottle, which will, if muriatic acid and ammonia be used, produce a vapor of the muriate of ammonia, which can be inhaled.

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

1. The acid-receiver C, having a tubular neck, *a*, fixed into the stopple B, and a tube, E, extended above and below its lower end, in combination with the adjustable feed-funnel D and inhaling-tube G, substantially in the manner and for the purpose described.

2. In combination with the receiver C, having the neck *a* extending up through the cork B, the funnel D, made vertically adjustable by means of the rubber tube *b*, as shown and described.

LUCIUS ELY FELTON, M. D.

Witnesses:

A. B. CONTRYMAN,

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