

Segnitz & Bastian,
Inhaler.

N^o 39,710.

Patented Sep. 1 1863.

Fig. 1

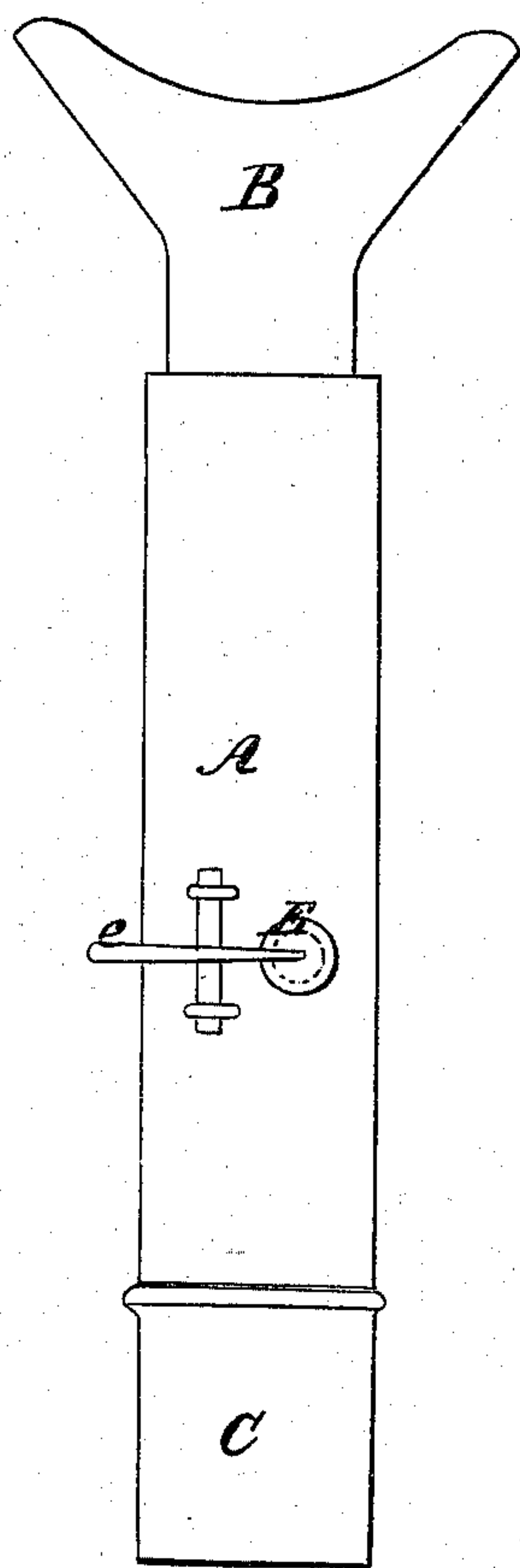
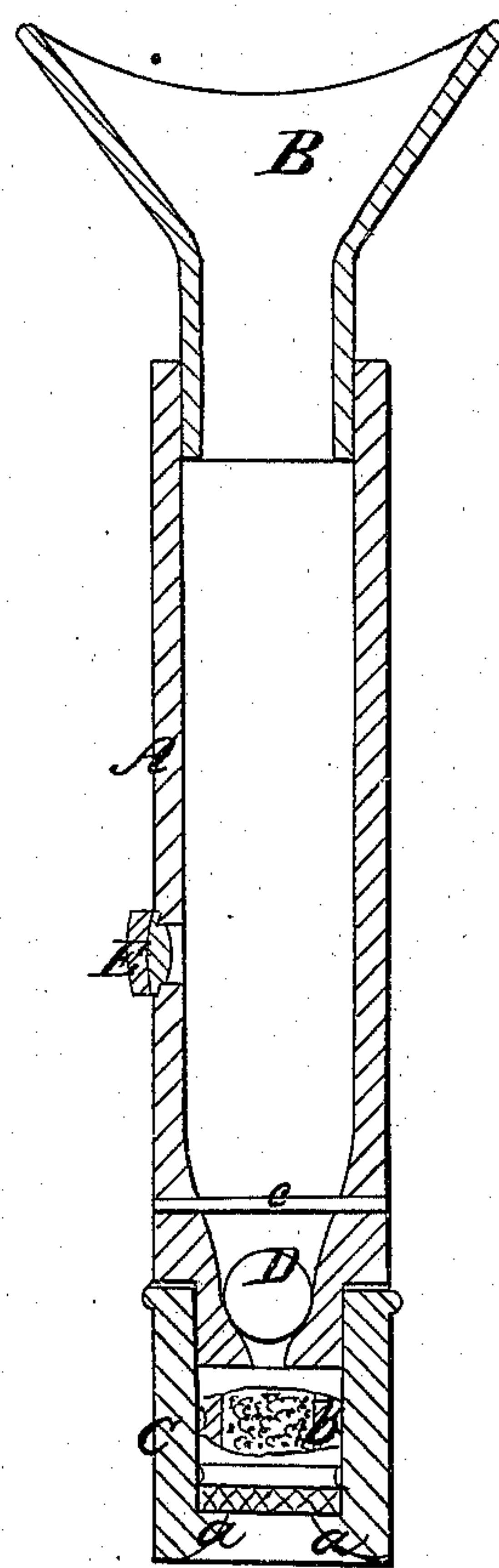


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

GOTTLOB BASTIAN AND BERNHARD SEGELITZ, OF NEW YORK, N. Y.

IMPROVEMENT IN INHALERS.

Specification forming part of Letters Patent No. 39,710, dated September 1, 1863.

To all whom it may concern:

Be it known that we, GOTTLOB BASTIAN and BERNHARD SEGELITZ, both of the city, county, and State of New York, have invented a new and useful Improvement in Inhalers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a front elevation of my invention. Fig. 2 is a vertical central section of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is an improvement in that class of apparatus which serves to administer aeriform medicines in form of inhalation.

The invention consists in the arrangement of a globe-valve between the medicine-chamber and the tube which leads to the mouth-piece of the inhaler in such a manner that the nitrogen and carbonic-acid gas expelled by the expiration is prevented from coming in contact with the medicine.

The invention consists also in the attachment of a spring lever-valve to the side of the inhaling-tube, between the globe-valve in its bottom and the mouth-piece in its top, in such a manner that by a pressure of the finger on the lever said valve can be thrown wide open, and by thus providing a free exhaust the expiration is rendered easier than it is with inhalers of the ordinary construction.

To enable others skilled in the art to make and use our invention, we will proceed to describe it.

A represents a tube, made of hard wood, glass, hard rubber, or any suitable material, and provided with a bell-shaped mouth-piece, B, made of porcelain or other suitable material, and of such a shape that by its application to the mouth the access of the external air is completely cut off. This mouth-piece is inserted into one end of the tube A and the other end receives the medicine-chamber C. This chamber consists of a short tube similar to the tube A, and open at both ends, one end being turned out to fit to the

end of the tube A, and the other end being provided with an internal flange or rim, *a*, to retain the medicine, which is put up in suitable charges, *b*, as clearly shown in Fig. 2 of the drawings.

D is a globe-valve, which fits into a seat in the bottom end of the tube A, where the same joins the medicine-chamber. A pin, *c*, running transversely across the tube, prevents this valve from flying out of its seat any farther than necessary to open the passage from the chamber C to the tube A. In drawing in the air through the tube A the valve D opens, and in expelling the air into the tube A the valve D closes, and the carbonic-acid gas and nitrogen expelled by the expiration is thus prevented coming in contact with the medicine in the chamber C. The tube A is also provided with a valve, E, which is closed by the action of a spring on the lever *e*, and which is arranged similar to the valve of a flute or other musical instrument. By the action of the spring this valve is constantly closed, and the external air is not allowed to enter the tube except through the chamber C, when the same must necessarily come in contact with the medicine to be inhaled. At the same time, by pressing upon the lever at the proper intervals, the valve is thrown open and the gases expelled by the expiration are allowed to escape without hinderance. The expiration is thereby rendered quite easy without destroying or weakening the effect of the medicine to be inhaled.

By using a spring lever-valve in preference to a globe-valve, which has been applied to the outside of the tube A, the inhaler can be used in any position. It is not necessary to hold it level, or in such a position that the valve will close while the air is drawn through the tube, and in expelling the air the spring lever-valve, when thrown open in time, offers no resistance whatever to the exhaust, whereas the weight of the globe-valve has to be overcome by the current of air, and consequently by the use of my valve the expiration is rendered easier and more free than it is with inhalers of the ordinary construction.

What we claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the globe-valve D in the bottom of the tube A and between the medicine-chamber C and mouth-piece B, in the manner and for the purpose substantially as herein specified.

2. The spring lever-valve E, in combination

with the tube A and medicine-chamber C, as and for the purpose set forth.

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Witnesses:

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