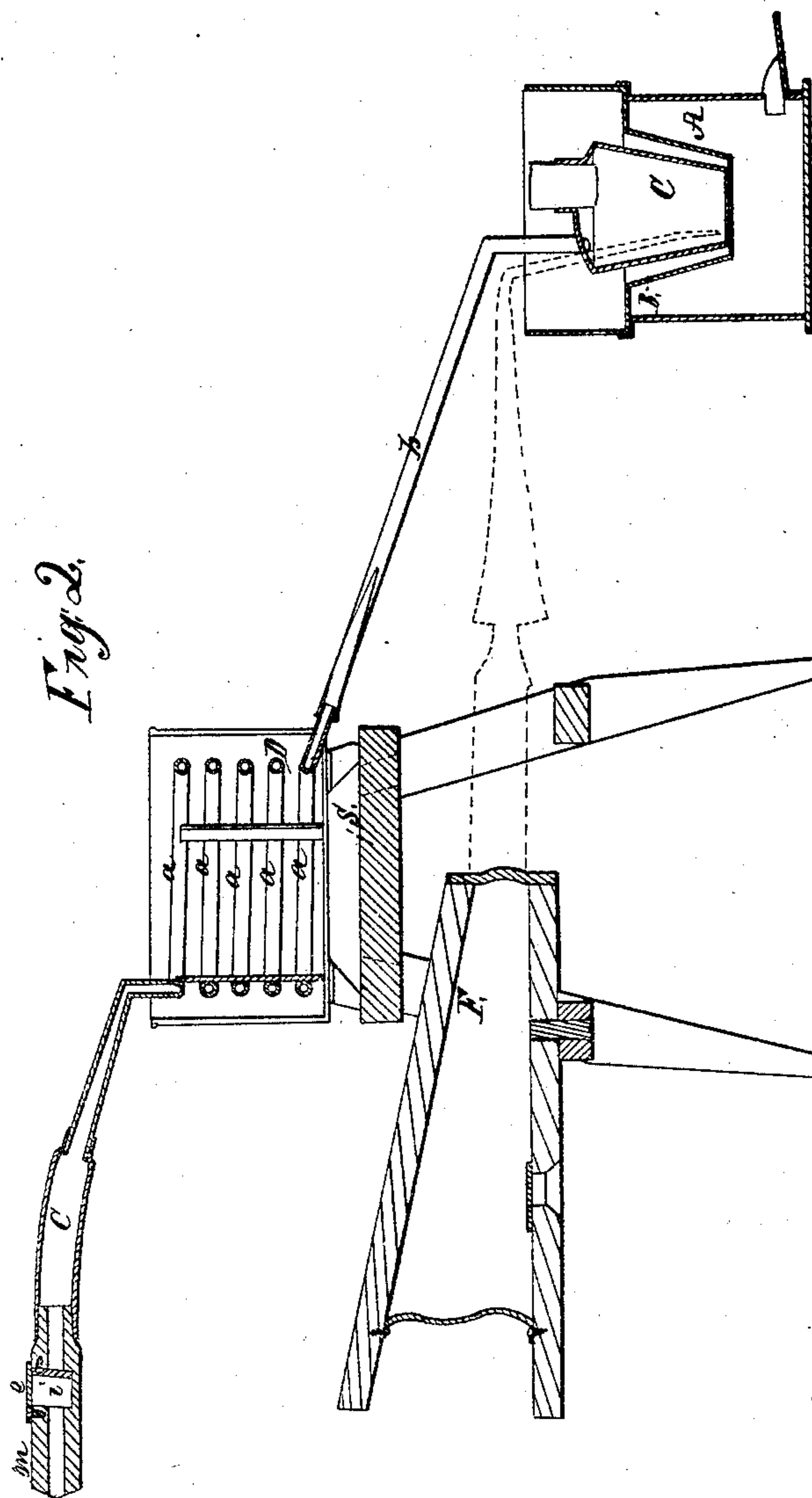
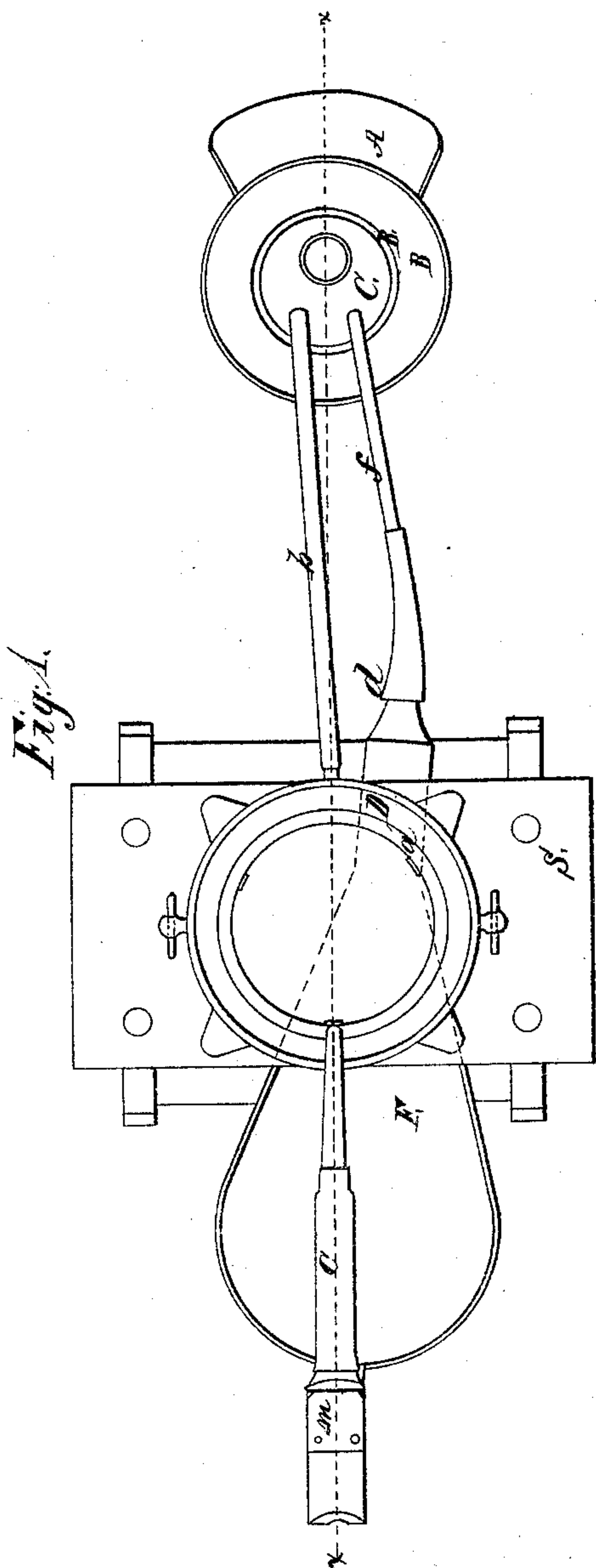


*S. H. T. Tilghman,*  
*Inhaler.*

*N<sup>o</sup> 11,976.*

*Patented Nov. 21, 1854.*



# UNITED STATES PATENT OFFICE.

SAML. H. T. TILGHMAN, OF SNOW HILL, MARYLAND.

## INHALING APPARATUS.

Specification of Letters Patent No. 11,976, dated November 21, 1854.

*To all whom it may concern:*

Be it known that I, SAMUEL H. T. TILGHMAN, of Snow Hill, in the county of Worcester and State of Maryland, have invented  
5 a new and useful apparatus for the inhaling of medicated air, called "Tilghman's Medical Inspirator"; and I do hereby declare that the following is a full, clear, and exact description of the construction and opera-  
10 tion of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a top view of the apparatus. Fig. 2 is a vertical section on line  $x x$  of  
15 Fig. 1.

Similar letters of reference in the several figures denote the same part of the apparatus.

My invention consists in the construction  
20 and arrangement of the herein described apparatus, which will be understood by reference to the drawing, in which A is a portable furnace over which is a wider vessel B, within which is the distilling vessel C  
25 which contains the herbs intended to impregnate the air inhaled by the patient. Upon the stand S is a vessel D containing a worm  $a$  which communicates by the pipe  $b$  with the distilling vessel C and whose upper  
30 extremity terminates in the flexible tube  $c$ . Under the stand S is the bellows F the nozzle  $d$  of which is connected with the tube  $f$  leading to the distilling vessel C. At the  
35 extremity of the tube  $c$  is the mouth piece  $m$  having the two valves  $e$  and  $i$  the former opening upward and the latter opening out-  
ward. The construction and arrangement of the several parts need not be precisely  
40 as herein set forth but may be varied in detail provided the main features are not departed from.

The object of this apparatus is to enable persons with diseased lungs to inhale medicated air in a comparatively dry state; its  
45 operation is as follows—The herbs are distilled in the vessel C by the well known means of placing a fire in the furnace A and filling the vessel B with water. The vessel D is also filled with cold water for  
50 effecting the partial condensation of the medicated vapor.

When the apparatus is ready for operation, the patient places the piece  $m$  in his mouth and by inspiration opens the valve  $i$  and receives the medicated air from the tube  
55  $c$ . The succeeding act of respiration closes the valve  $i$  and opens the valve  $e$  giving the air from the lungs a free passage to the open air; the next inspiration closes the valve  $e$  and opens  $i$  as before and so the  
60 valves are alternately opened and closed during the operation.

Should the lungs of the patient be weak the bellows F is brought into requisition, air being forced through the tube  $f$  to the  
65 vessel C, and thence to the lungs as above described.

The medicated vapor from the vessel C becomes partially condensed in passing through the worm  $a$  and runs back to the  
70 said vessel in a liquid form; while the air which enters the lungs of the patient is thus comparatively dry and impregnated to some extent with the medicine.

Of the effect of the inhalation upon the  
75 patient it is not here necessary to speak as this application merely refers to the construction and arrangement of the apparatus by which the air reaches the lungs in a comparatively dry state, and by which  
80 they are assisted in the inspiration.

Having thus described the construction and operation of my apparatus, I expressly disclaim the parts composing it separately  
85 considered.

What I claim as my invention and desire to secure by Letters Patent, is—

The combination of worm  $a$ , tubes  $c$  and  $f$  mouth piece  $m$ , bellows F and distilling vessel C constructed and arranged substan-  
90 tially as set forth for furnishing medicated air in a comparatively dry state and assisting the respiration of the patient in inhaling it as herein before specified.

In testimony whereof, I have hereunto  
95 signed my name before two subscribing witnesses.

SAMUEL H. T. TILGHMAN.

Witnesses:

GEO. PATTEN,  
SAML. GRUBB.