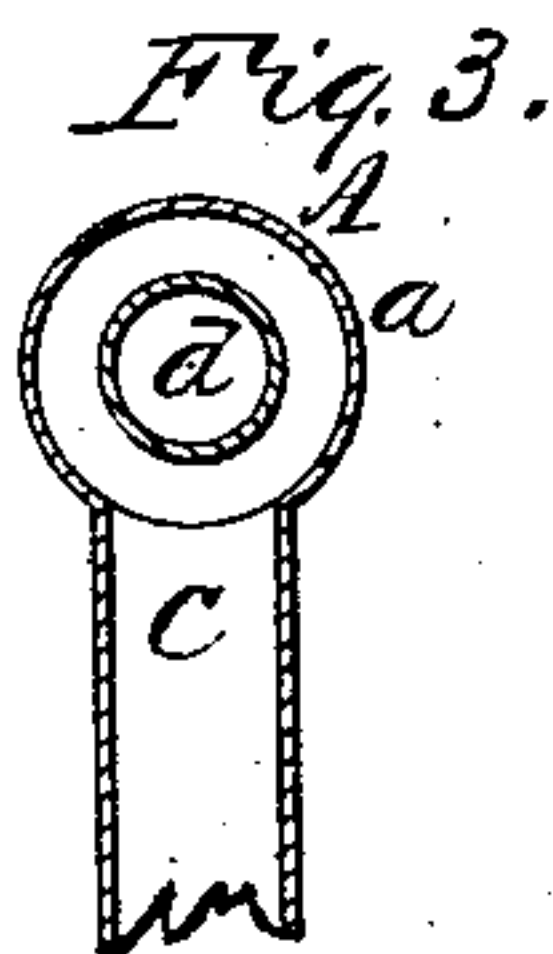
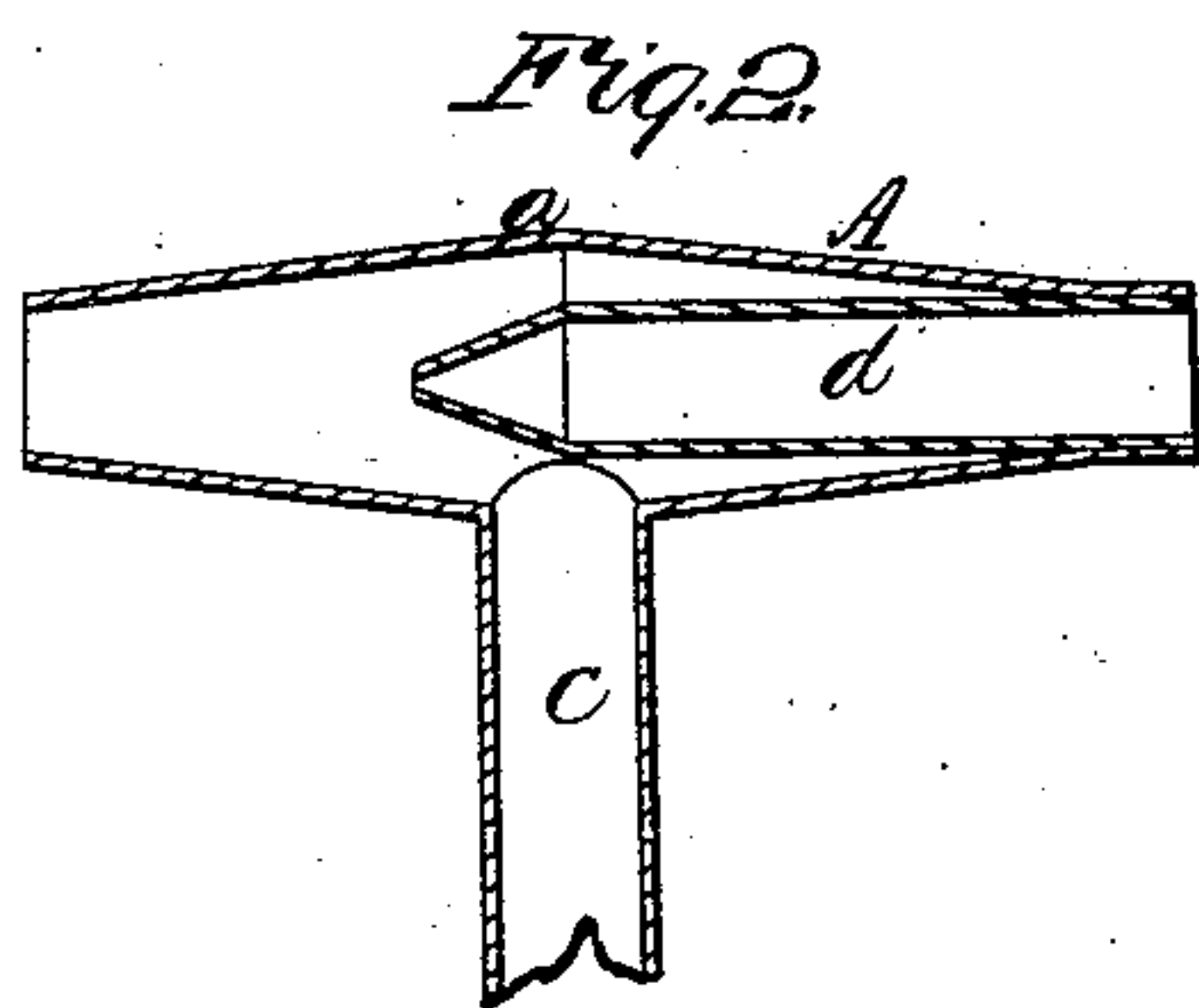
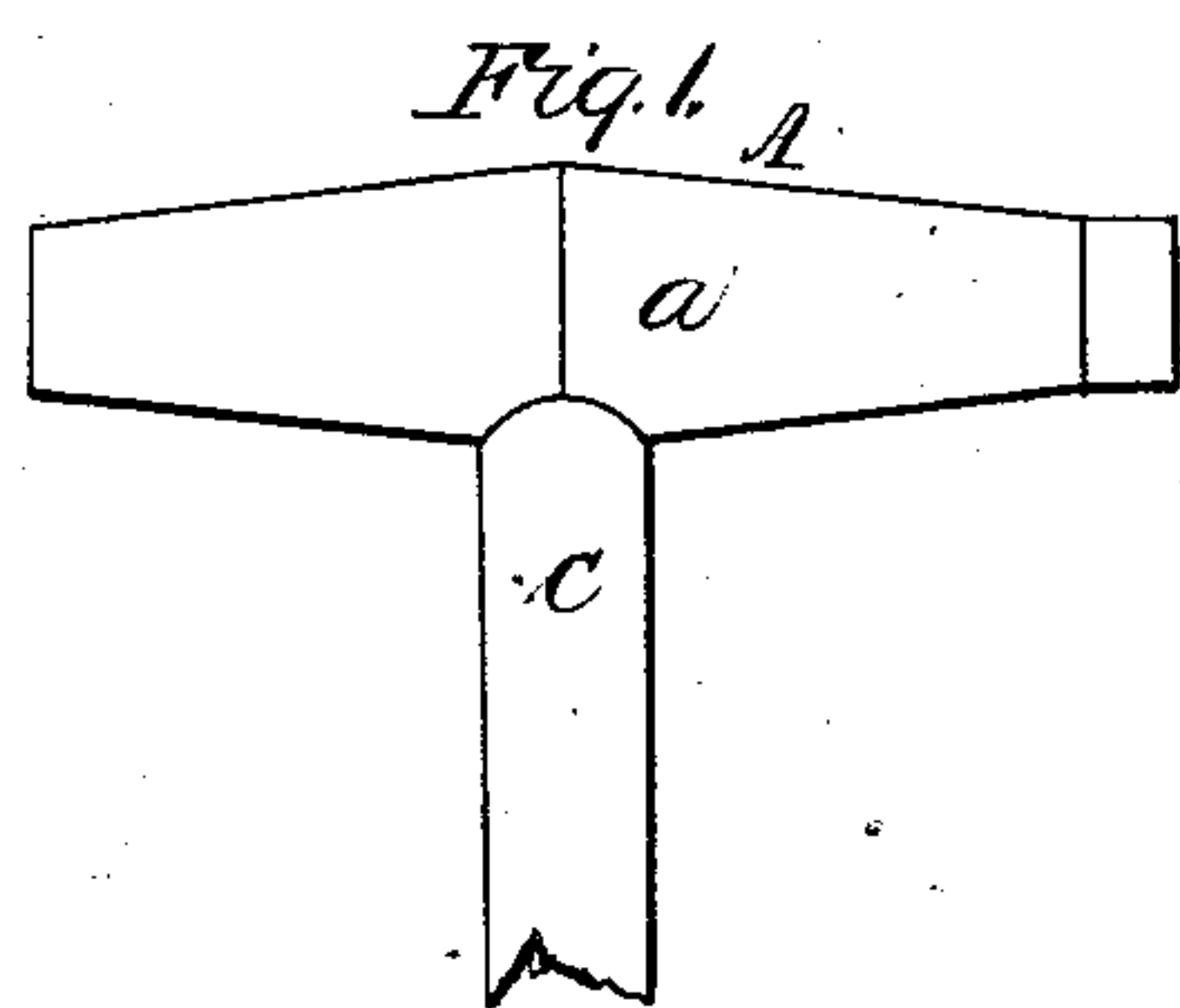


*E. H. Ashcroft,*

*House Ventilator,*

*N<sup>o</sup> 81,060.*

*Patented Aug. 18, 1868.*



*Witnesses:*  
*M. W. Pitts,*  
*Ballis De Long*

*Inventor:*  
*E. H. Ashcroft.*  
*by his atty S. S. Farnsworth*

# United States Patent Office.

E. H. ASHCROFT, OF LYNN, MASSACHUSETTS.

*Letters Patent No. 81,060, dated August 18, 1868.*

## DEVICE FOR VENTILATING AND DESICCATING.

*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, E. H. ASHCROFT, of Lynn, in the county of Essex, and State of Massachusetts, have invented a new and useful Device for Purposes of Ventilation, Desiccation, &c.; and do hereby declare the following to be a full, clear, and exact description of the same, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a side elevation,

Figure 2 a vertical and longitudinal section, and

Figure 3 a vertical and transverse section of my invention.

The object of this invention, is to create a powerful draught through a pipe or conduit, for the purpose of carrying off, in a rapid and effective manner, from buildings or apartments, any foul or tainted air, smoke, &c., which would otherwise collect and remain in such places; the invention, when applied to a suitable device, being further useful for desiccating various substances or materials, such as unwashed wool, &c.

The invention consists in one or more T-shaped pipes or conduits, one horizontal arm or portion of such T having a blast-pipe, *d*, disposed within it, and terminating at or about the centre of communication of the horizontal and upright portions of the T, in manner and to operate as hereinafter described.

In the drawings above referred to, A denotes a T-shaped pipe or conduit, the horizontal portion of which is shown at *a*, and the vertical portion at *c*, there being free communication through the interior of all parts of such T.

The vertical portion, *c*, of such T is to connect with the apartment, building, or other object intended to be purified or ventilated, and a blast of steam or air forced through the horizontal pipe *a*. This blast, crossing the path or opening of the upper end of the pipe *c*, creates a powerful suction or draught through it, entirely sufficient to carry off rapidly from an apartment any vapors or noxious air contained therein.

The steam to be used to produce the suction and force out the foul air passing up the vertical pipe *c*, driving it out one end of the horizontal arm *a*, passes through the inner horizontal pipe *d*, connection being made in any convenient manner between said pipe *d*, at its outer end, and a steam-generator. A strong current of air, cold or heated, may be forced through pipe *d*, instead of steam, this being effected by any suitable mechanism.

In apartments or buildings where the process of sweating sheep-skins is carried on, it becomes important to provide some means of thoroughly and at once ventilating such apartments at a certain stage of progress of the treatment of the skins, the difficulty of accomplishing this heretofore being the cause of destruction of large numbers of skins annually.

Applied to this purpose, my invention will be found to be of particular value.

For the purpose of ventilating sleeping-cars upon railways, or of freeing the holds or cabins of navigable vessels, the invention will also be found to be of great practical value.

Many other instances of application of my invention will suggest themselves to persons conversant with the subject of ventilation.

The invention may further be applied to a suitable reservoir or conduit containing wool or other kindred substances or materials, for the purpose of drying, which it will accomplish in a short space of time, and with great economy.

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

The combination of the T-shaped pipe A and the inner horizontal one, *d*, constructed and operated in the manner substantially as shown and described and for the purpose set forth.

E. H. ASHCROFT.

Witnesses:

EDWIN J. WRIGHT,

C. E. ASHCROFT.