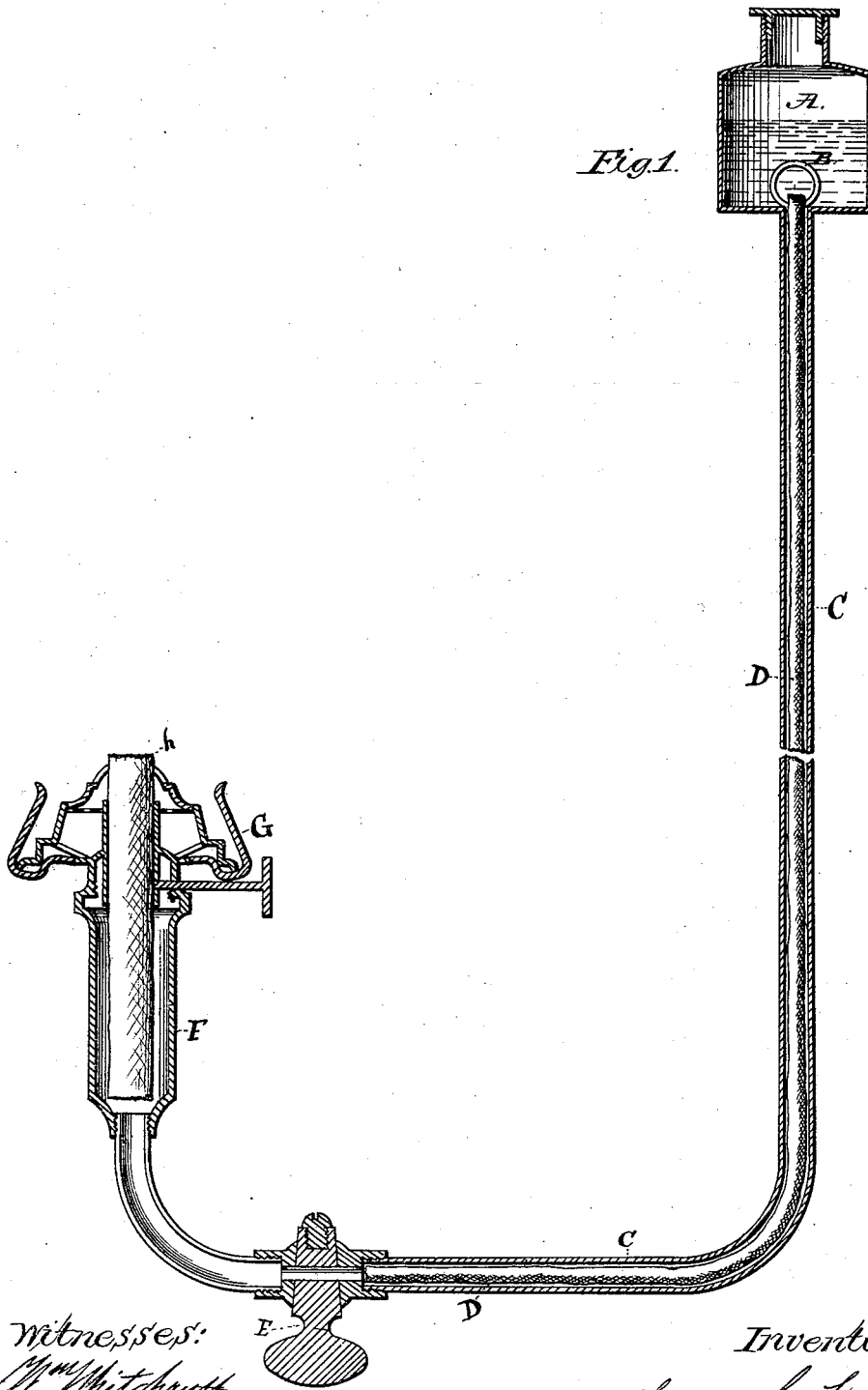


F. C. HOOTON.

Apparatus for Lighting and Heating Houses.

No. 164,371.

Patented June 15, 1875.



Witnesses:  
Wm. Mitchell.  
S. J. Willauer.

Inventor:  
Francis C. Hooton.

# UNITED STATES PATENT OFFICE.

FRANCIS C. HOOTON, OF WEST CHESTER, PENNSYLVANIA.

## IMPROVEMENT IN APPARATUS FOR LIGHTING AND HEATING HOUSES.

Specification forming part of Letters Patent No. **164,371**, dated June 15, 1875; application filed January 11, 1875.

*To all whom it may concern:*

Be it known that I, FRANCIS C. HOOTON, of West Chester, in the county of Chester and State of Pennsylvania, have invented a new and Improved Machine for Lighting and Heating Houses, of which the following is a specification:

The nature of my invention consists in combining in a fountain reservoir machine a tube of any length, connecting the reservoir with the fount, the tube containing a wick that shall bear the proportion of one to three to the bore of the tube. It relates also to the employment of a ring, larger in diameter than the diameter of the tube, to be placed in the reservoir, and to which the wick is fastened. The object of the ring is to prevent the wick from being displaced. It also relates to the employment of a cut-off at the point where the tube is attached to the fount, the object of which is to prevent the oil from overflowing when the light is extinguished.

In the accompanying drawing, A is the reservoir. B is the ring in the reservoir, to which the wick is fastened. C is the tube extending from the reservoir A to the fount F. D is the wick, fastened to the ring B, and extending through the tube C to the cut-off E. E is the cut-off. F is the fount. G is the burner attached to the fount, and *h* is the wick of the burner G.

It is necessary to the successful operation of my improvement that wick D should bear the proportion to the diameter of the bore of tube C as above described, and that it should be secured in place by ring B.

The reservoir being filled with oil, the wick D in tube C becomes saturated with oil, and expands and fills tube C, and the oil slowly passes through cut-off E to wick *h* of the burner G, the result of which is that a small but uniform supply of oil will be found in all parts of the tube, and a small uniform supply of oil insured to the flame, thereby securing a steady light, free from the danger of explosion.

I do not claim it as new to use two different wicks—one for feeding and another for burning; nor do I claim as new the conducting petroleum from an elevated reservoir through pipes for lighting and heating.

I claim—

The combination of reservoir A, ring B, tube C, wick D, cut-off E, and fount F, substantially as and for the purpose set forth.

FRANCIS C. HOOTON.

Witnesses:

WM. WHITEHEAD,  
S. G. WILLAUER.