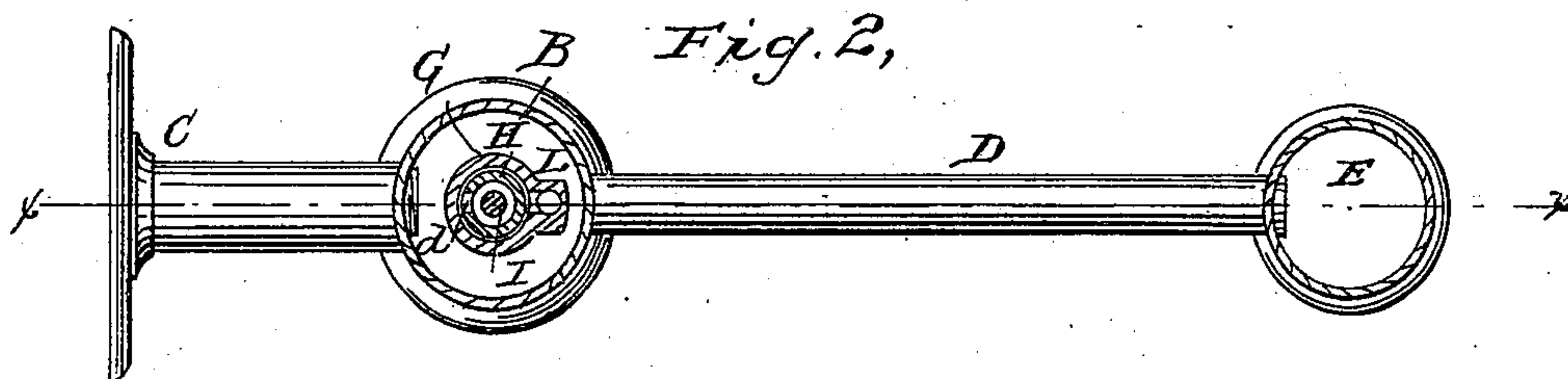
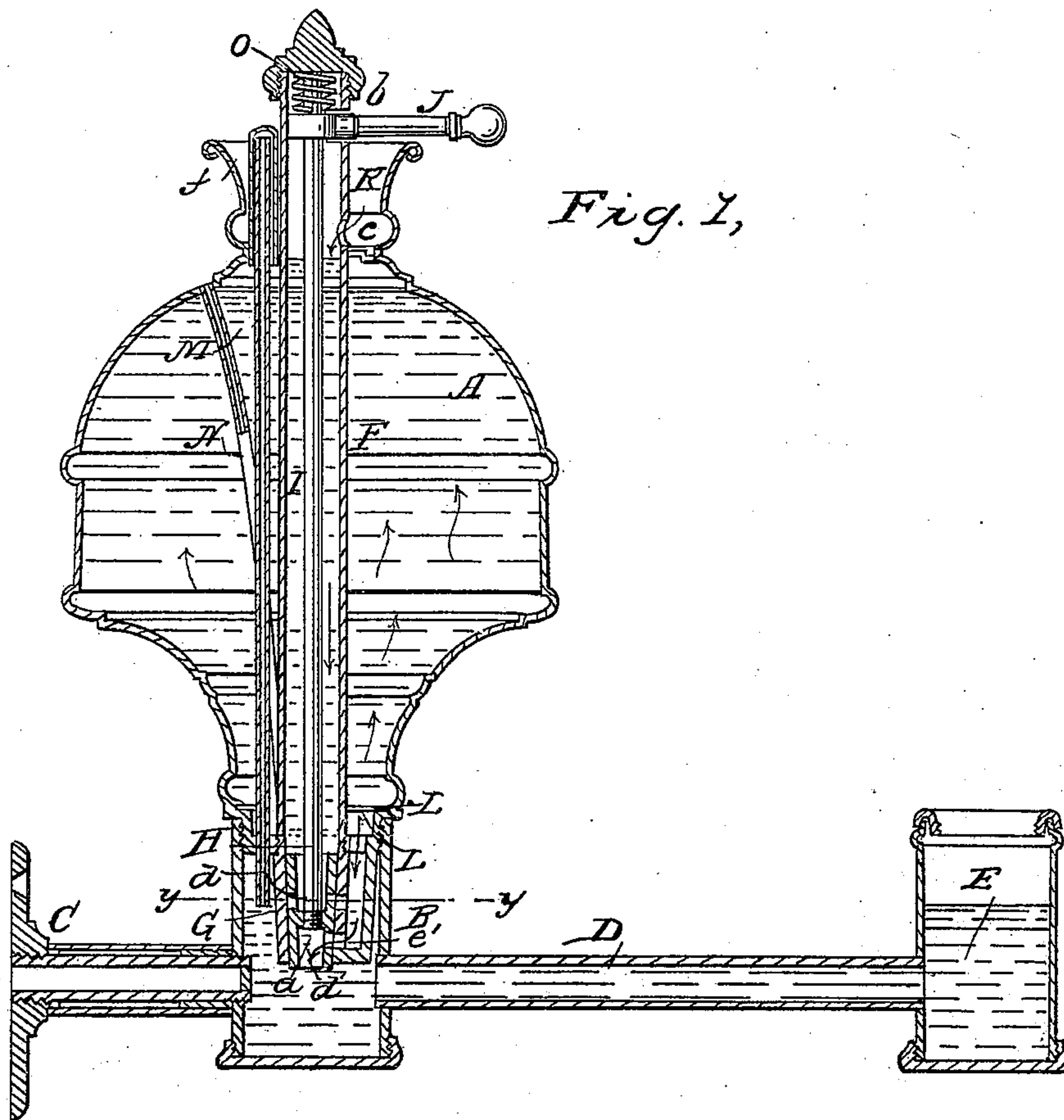


J. H. SEAMAN.

Lamp.

No. 38,846.

Patented June 9, 1863.



WITNESSES.

*Timothy Shive*  
*W. S. Partridge.*

INVENTOR

*John H. Seaman*

# UNITED STATES PATENT OFFICE.

JOHN H. SEAMAN, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN FOUNTAIN-LAMPS.

Specification forming part of Letters Patent No. 38,846, dated June 9, 1863.

*To all whom it may concern:*

Be it known that I, JOHN H. SEAMAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in that class of lamps the wicks of which are supplied with oil or other burning material from an elevated fountain, or one which projects above the burner. This class of lamps possesses an advantage over the ordinary lamps which have the burner attached to the top of the fountain, for the reason that the former supply the flame with a uniform amount of burning material, and thereby cause a constant flame, or one of uniform intensity, so long as any burning material remains in the fountain, whereas, in the ordinary lamp, the intensity of the flame diminishes as the level of the burning material in the fountain descends from the flame, as the supply of the former to the flame proportionably diminishes with its descent.

The present improvement consists in certain combinations of parts, hereinafter described, whereby the flow of oil in lamps of the class referred to is rendered more uniform.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, Figure 1, represents the fountain of the lamp, the lower end of which is screwed into a cup, B, attached to a bracket, C, and having a tube, D, communicating with it, said tube communicating at its outer end with a small chamber, E, into the upper end of which the lamp-burner is screwed, the wick of the burner being in said chamber. The fountain A, it will be seen, projects considerably above the chamber E, and the latter has a tube, F, fitted permanently and centrally in it, the lower end of the tube being screwed into a conical socket, G, in which a valve, H, is fitted

and allowed to turn freely. The valve H is a hollow cone provided with a horizontal partition, *a*, in which the lower end of a rod, I, is screwed or otherwise secured, said rod extending up in the tube F, and having a handle, J, attached to its upper part, said handle extending through a slot, *b*, in the upper part of tube F. On the upper part of the fountain A there is permanently secured a funnel-shaped chamber, K, through which the tube F passes centrally. This chamber communicates at its lower part with the tube F by means of a hole, *c*, made in the latter, as shown in Fig. 1. The valve H has two holes, *d d'*, the former being above and the latter below the partition *a*. These openings are at the opposite sides of the valve, and the socket G, in which the valve is fitted, has two holes, *e e'*, made in it, one being directly over the other and in line respectively with the holes *d d'* in the valve. The holes *e e'* in the socket G form a communication between said socket and a small chamber, L, which adjoins the socket G and communicates at its upper end with the fountain A.

M is a tube, which is fitted in the fountain, and projects down through its bottom a certain distance into the cup B. The upper part of this tube projects above the top of the fountain and is inclosed by a case, *f*, the lower end of which communicates with the fountain.

N is a tube, which passes entirely through the fountain and forms a communication between the cup B and the external air.

On the upper part of the valve-rod I there is a spring, O, which has a tendency to keep the valve H fitted snugly in its socket.

The operation is as follows: The fountain A is filled with the burning material by turning the valve H so that the hole *d* thereof will register or be in line with the hole *e* in the socket, and the hole *d'* be out of line with the hole *e* in the socket. When the valve is in this position, a communication is formed between the tube F and the fountain A, and all communication cut off between A and B, and by pouring the burning material into the chamber K it will pass through hole *c*, down through tube F, through the holes *d e* in the valve and socket, and up through the chamber L into the fountain A, as indicated by the red arrows in Fig. 1. When the fountain is thus filled, the valve is turned so as to bring its hole *d'* in line with the hole *e'* of the socket,



and the communication between the tube F and the fountain A is thereby cut off and a communication formed between the fountain and the cup B, as indicated by the black arrows, and the burning material will flow from A into B, and thence through tube D into the chamber E, to which the burner is attached. The burning material will flow from A until it rises in B sufficiently to cover the lower end of the tube M, and the flow will then cease in consequence of atmospheric pressure being taken off from the upper surface of the burning material in A, for, when the lower end of tube M was open, the air in B above the burning material passed up through tube M into the upper part of A B, being supplied with air by means of tube N. As the burning material is consumed in E the level of the same, of course, falls in B, and when the lower end of M is left free, air will rush up through it and cause a flow from A into B. Thus it will be seen that the chamber E will be kept constantly supplied with burning material so long as any remains in A, the device being self-feeding, the consumption of the burning mate-

rial causing a supply and without the possibility of an overflow, as the burning material in A cannot escape without a pressure of the atmosphere on its upper surface, and this cannot occur when the burning material is above the lower end of tube M. The tube M also admits of the escape of the air from the fountain while the latter is being filled. Thus, by this simple arrangement, a perfect self-feeding fountain-lamp is obtained, and a reliable and safe one.

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

1. The combination of the air-tubes M N and chamber L with the chamber E and fountain A, substantially in the manner herein shown and described.

2. The combination, with the above-named parts, of the tube F, valve H, and socket G, as shown and described.

JOHN H. SEAMAN.

Witnesses:

TIMOTHY SHINE,  
M. S. PARTRIDGE.