O. REDMOND.

Lamp.

No. 9,878. Patented July 26, 1853.

Fig. 1.

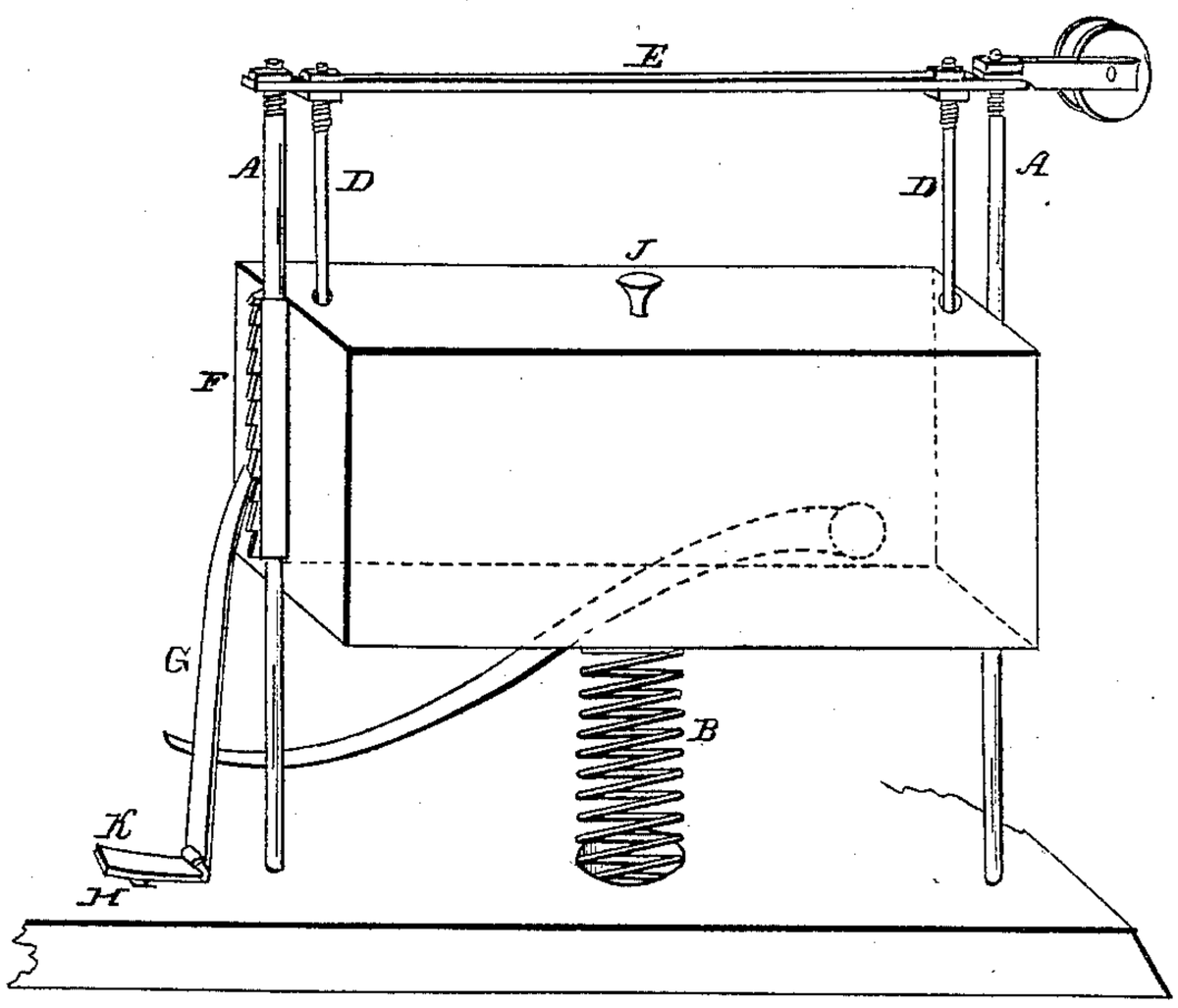
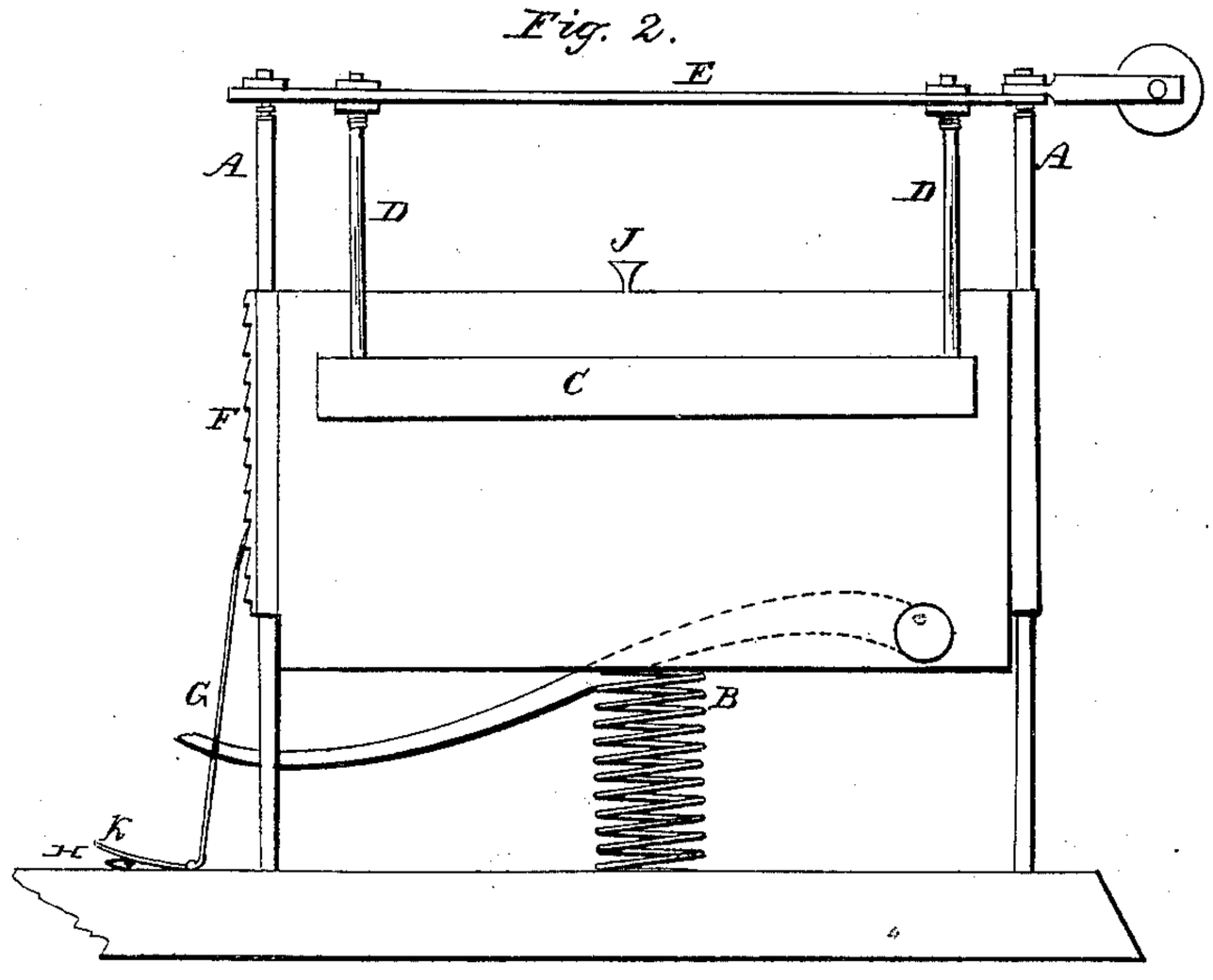


Fig. 2.



N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

OWEN REDMOND, OF ROCHESTER, NEW YORK.

LAMP.

Specification of Letters Patent No. 9,878, dated July 26, 1853.

To all whom it may concern:

Be it known that I, OWEN REDMOND, of Rochester, Monroe county; State of New York, have invented a new and Improved Oil-Fountain for Lamps; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

Figure 1 is a perspective view of the oil fountain. Fig. 2 is a longitudinal elevation of the same having the front side taken out that the interior may be seen.

The oil fountain may be made of any convenient form, square, circular, or otherwise, and of the ordinary methods used for such. I have shown a rectangular oblong vessel, which slides up and down freely on two upright rods or bars marked A, Figs. 1 and 2, the vessel or fountain having a tube secured at each end through which the rods pass.

B is a coiled or spiral spring placed under the fountain and is made of a strength suitable to the weight of the oil and vessel containing it, and its elasticity or spring enough to lift the empty vessel from its lowest position until its bottom touches the under side of the governor or float marked C. This governor consists of a piece of flat wood or it may be a hollow vessel of tin plate, &c., its length and breadth nearly equal to the length and breadth of the fountain. It may be an inch or more thick. This float or governor fits inside the fountain, but not so as to touch the latter in any place. The governor is firmly attached to two metallic rods D, which rods are secured by nuts at top to a bar E, which passes over the fountain from one end to the other and is secured firmly to the upright rods or standards A. The governor or float is to be fixed in its proper position within the fountain the latter having two small holes in its upper surface or lid to admit the bars D of governor to pass through. The fountain can then move up or down while the governor or float remains stationary.

F is a ratchet bar fast to the fountain into which the catch G plays so that as the fountain is raised by the spring B the catch will fall into one or other of the ratchets in the bar and therefore prevent the fountain from having a jolting or dancing motion. The catch has a weak spring under it H. The ratchet is not necessary for a stationary lamp.

J is a small dish through which oil is poured into the fountain.

The object to be attained by this plan of fountain is to retain the surface of the oil on the same level or height at all times no matter what the quantity of oil contained in the fountain may be and as a matter of course the oil will stand at the same level in the burner.

I propose to connect the fountain with the burner by an elastic tube through which the oil will flow. Any artist can fit it to suit his own fancy either to the bottom or side of the fountain and burner by suitable screws. An elastic tube becomes necessary, as if a rigid tube were used it would prevent the fountain ascending. When oil is to be poured into the fountain let the catch be disengaged from the ratchet by pressing on the end of it, K, and as the oil is being introduced the fountain descends of itself. The use of the governor or float is first to prevent the oil in the fountain from splashing about if jolted as it would do on a locomotive engine and secondly to serve as a check on the action of the spring which might sometimes be made too strong or the specific gravity of the oil might sometimes be less than at others in which case the spring if ungoverned would lift the fountain too high for the burner and hence it would overflow and smoke but it will answer the purpose intended if the spring be made strong enough to keep the oil slightly pressed against the governor or float the latter will prevent its rising too high. Then whatever height it is intended to retain the surface of the oil in the burner let the bottom of the float be set just on that intended level.

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

Resting the oil fountain for lamps upon a spring or springs so constructed as to retain the surface of the oil in the fountain constantly at a nearly uniform height, and this I claim whether used with or without a float as above described and set forth.

OWEN REDMOND.

Witnesses:

CHAS. MARKS,

WILLIAM DORAN.