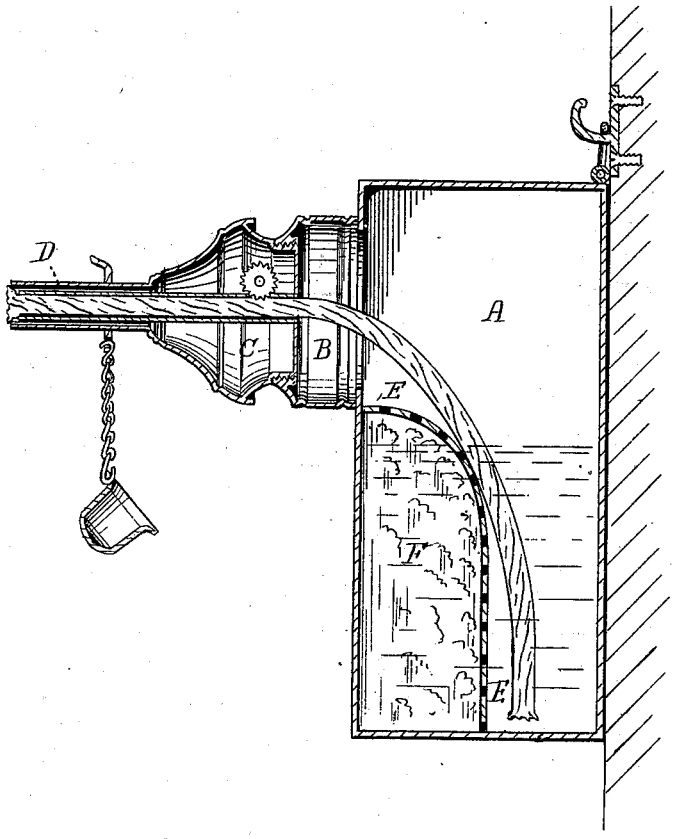
G. F. GEER.
Lamp.

No. 199,699. Patented Jan. 29, 1878.



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UNITED STATES PATENT OFFICE.

GEORGE F. GEER, OF CONCORD, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE L. DAMON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **199,699**, dated January 29, 1878; application filed January 9, 1878.

To all whom it may concern:

Be it known that I, GEORGE F. GEER, of Concord, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamps for Applying Sealing-Wax to Letters, Packages, and other like articles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved lamp, which is especially designed for applying wax to letters, packages, and other like articles, for the purpose of sealing the same.

The ordinary lamp, as commonly constructed with a vertical wick-tube, when employed for this purpose, is attended with serious objections. In the first place, to apply the wax it has first to be ignited in the flame of the lamp, and the dripping stick then carried to the article. Besides the waste thus occasioned, the wax soils and defaces whatever it touches, and, being in an ignited condition, will readily set fire to combustible articles. Moreover, during the passage of the wax from the lamp to the article it is extremely liable to become extinguished and cooled to such an extent that it cannot be properly applied. Again, in the ordinary lamp with a vertical wick-tube, the wax is liable to drop upon the wick and enter the wick-tube, clogging the wick and tube and extinguishing the flame of the lamp.

The object of my invention is to overcome these objections, which I accomplish by constructing my lamp with a horizontal instead of a vertical wick-tube. But I have found that such construction necessitates the employment of certain other devices, in combination with the wick-tube, to enable the wick to be adjusted and the fluid to be properly distributed thereto; and to this end my invention consists, first, in the combination, with a lamp constructed with a horizontal wick-tube or burner, of a curved diaphragm or partition within the lamp-fount, to facilitate the adjustment of the wick in the wick-tube or burner, as more fully hereinafter set forth; and, second, in the combination, with the lamp and said diaphragm, of a series of perforations through said diaphragm, and an absorbent filling packed in the space at one side of said diaphragm, for the purpose of distributing the oil to the wick, as more fully hereinafter described.

The drawing represents a vertical sectional view of my improved lamp, in which the letter A represents the lamp fount or body, which is constructed of any suitable material and in any desired shape, consisting, in the present instance, of a sheet-metal vessel of rectangular shape. The letter B represents a lamp-collar, and C the burner-cap secured thereto, both of which are constructed in the ordinary manner. The collar B is secured to one of the vertical sides of the lamp fount or body, opposite a suitable opening therein, and near the upper end of the same, in such position that when the burner-cap C is in place the wick-tube or burner D will extend horizontally from the lamp fount or body in such manner that a letter, package, or other article may be conveniently held or placed under said wick-tube or burner. The outer extremity of said wick-tube or burner is terminated, preferably, in a vertical plane, so that the melting wax will fall clear of said extremity without entering and clogging the wick; but the extremity may be terminated at an angle, or beveled off on its lower side, leaving the upper side slightly projecting over the end of the wick, to further protect the same from the melting wax, if desired.

The letter E represents a curved diaphragm or partition located within the lamp-fount, and extending from a point directly below the lamp-collar backwardly and downwardly into said fount, as shown, the said diaphragm serving to prevent the wick from dropping abruptly from the inner end of the wick-tube into the fount, which would cause the wick to bind at said inner end of the wick-tube, and render it difficult to move the wick forward in the tube for the purpose of adjustment. The diaphragm is, preferably, perforated or constructed of foraminous material, and the space E between said diaphragm and the wall of the lamp-fount is filled with an absorbent

packing—such as cotton or sponge, for instance—the object of which is to convey the oil upward when it gets low in the lamp, and distribute it through the perforations in the diaphragm to the wick.

The letter F represents a loop secured to the upper end of the lamp-fount, by means of which it can be suspended upon a proper support; but it is evident that the lamp-fount can be mounted upon a pedestal, or provided with other supporting means, if desired.

The operation of my improved lamp will be readily understood in connection with the above description. The packages to be sealed are held or placed directly under the end of the wick-tube or burner, and the wax is held in the flame of the lamp and allowed to drop upon the package as it melts until a sufficient quantity has accumulated to properly effect the sealing. The wick-tube, being in a horizontal position, permits the wax to fall clear of the end of the same; hence there is no possibility of its entering said wick-tube and clogging the wick, and, as the stick never has to be removed from the flame during the operation, the inconveniences attendant upon the dripping of the wax and the extinction of the flame of the stick are wholly obviated.

It is obvious that various modifications of my improved lamp may be made without departing from the spirit of my invention; and therefore I do not limit myself to the precise details of construction herein shown and described.

I am aware that lamps have been heretofore constructed having wick-tubes located at one side of the fount, and also that lamps having vertical wick-tubes have been constructed with a foraminous tube in the fount, into which the wick falls, said tube being surrounded by absorbent material; and these features I do not claim broadly.

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

1. In combination with a lamp having a horizontal wick-tube, the curved diaphragm for facilitating the adjustment of the wick, substantially as specified.

2. The combination, with the lamp and its horizontal wick-tube or burner, of a perforated or foraminous diaphragm and the absorbent packing or filling for distributing the oil to the wick, substantially as specified.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

GEO. F. GEER.

Witnesses:
WALDO ADAMS,
H. W. DOW.