

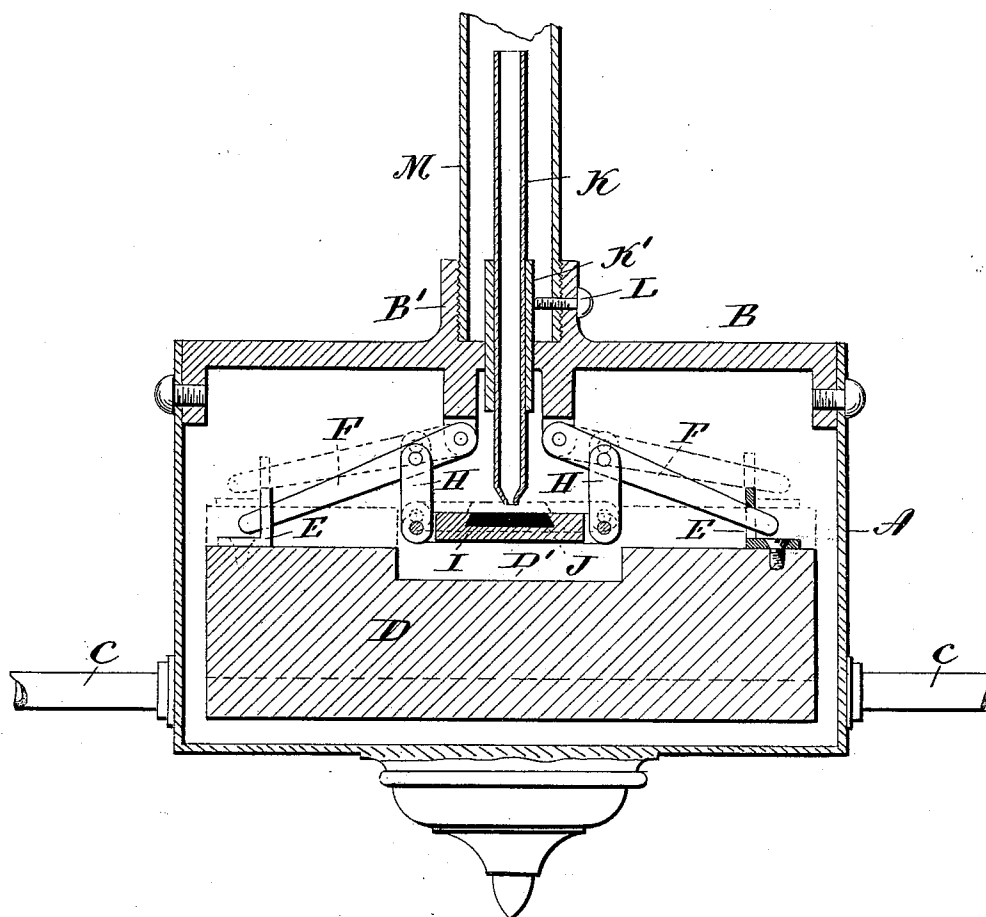
(No Model.)

H. S. PULLMAN.

OIL REGULATOR FOR CONTINUOUSLY FED LAMPS.

No. 520,611.

Patented May 29, 1894.



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OIL-REGULATOR FOR CONTINUOUSLY-FED LAMPS.

SPECIFICATION forming part of Letters Patent No. 520,611, dated May 29, 1894.

Application filed January 8, 1894. Serial No. 496,090. (No model.)

To all whom it may concern:

Be it known that I, HERBERT S. PULLMAN, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Oil-Regulators for Continuously-Fed Lamps; and I do hereby declare the following, when taken in connection with accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in the figure, a view, partly in elevation and partly in section, of a lamp-fount containing my invention.

My invention relates to an improvement in regulators for the founts of that class of lamps which are used in conjunction with an apparatus feeding a continuous supply of oil, the object being to produce a simple and reliable regulating device of positive and automatic operation, composed of few parts and not liable to derangement.

With these ends in view, my invention consists in a regulator, having certain details of construction and combinations of parts, as will be hereinafter described and pointed out in the claims.

As herein shown, the lamp-fount consists of a circular body A and a head B, which is inserted in and secured to the open upper end of the body, the same being provided at its lower end with two oppositely projecting hollow arms C C, carrying burners, which are not represented. I would have it understood, however, that I do not limit myself to constructing the fount in any particular way, as any fount of approved form may be employed in carrying out my invention. Within the fount I locate a large float D, of any suitable material, which is provided upon its upper face with two brackets E E, located opposite each other, and each having an upright vertically slotted arm. The slots of the said brackets receive the outer ends of two corresponding operating-levers F F, the inner ends of which are pivoted to lugs or hangers G G, depending from the inner face of the head B, before mentioned, on opposite sides of the center thereof. The said levers are thus flexibly connected, as it were, at their outer ends with the float, which causes them to be raised and lowered as it rises and falls in the fount.

When the float rises, the outer ends of the arms will be pushed farther through the slots in the brackets, as indicated by broken lines in the drawing. Each of the said operating-levers is provided toward its inner or upper end with a depending link H, the lower ends of the said links being respectively attached to the opposite ends of a bar I, carrying a valve J in the form of a pad, at a point directly under the reduced lower discharge-end or nozzle of the feed-pipe K which discharges vertically downward. When the float is raised by the inflow of oil into the fount, it will operate through the medium of the levers F F and the links H H, to positively raise the valve-bar I, and hence draw the valve J against the lower end of the feed-pipe and close the same, whereby the inflow of oil into the fount is temporarily stopped. Then, as the oil is consumed by the burners at the ends of the arms C, the float will proportionately fall and cause the valve to be positively moved away from the discharge end of the feed-pipe, which will again feed oil into the fount until the raising of the float has lifted the valve into contact with it again. As herein shown, the float is centrally cut away, as at D', to clear the valve-pipe I, but that construction is not essential, although it effects an economy of space. The connections of the feed-pipe K may be of any suitable character, and do not need description here, but it will be understood that it is entered into the lower end of a supply-pipe in which it is packed for telescopic or slip movement, in a manner well known in this art. To provide for the vertical adjustment of the feed-pipe with reference to the valve J, I furnish it with a reinforcing sleeve K', which receives the impingement of an adjusting screw L mounted in the hub B' extending upward from the center of the head B, the said hub receiving the lower end of the shell M, which is provided to inclose the feed and supply pipes. I might dispense with the reinforcing sleeve K', but I prefer to use the same, inasmuch as the feed-pipe itself is comparatively small and made of light metal, whereas the sleeve virtually enlarges the size of the pipe and makes it stronger and larger within the range of adjustment and the impingement of the set screw L. It is apparent that, by rais-

ing and lowering the feed-pipe with reference to the valve J, the action of the same may be closely regulated.

Having set forth the operation of my improved regulator in describing its construction, I need not again refer to its operation more than to say that the valve is automatically and positively cut into and cut out of operation, which is to say, presented to and withdrawn from the discharge end of the feed-pipe, whereby my device is made perfectly reliable in its action.

It is apparent that in practicing my invention some changes may be made in the construction and form of the parts shown, and I would therefore have it understood that I do not limit myself to such form, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention. I am aware, however, that it is not new to construct an automatic oil-regulator with a float, a valve, and connection between the float and valve whereby the latter is operated by the rising and falling of the float, and do not therefore claim such construction broadly.

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

1. In an automatic oil-regulator for continuously fed lamps, the combination with a lamp-fount, of a float located therein, a feed-pipe entering the fount and arranged to discharge vertically downward at a point di-

rectly over the float, a valve interposed between the discharge-end of the pipe and the float, a plurality of operating-levers connected at their upper ends with the fount, and having their lower ends connected with the float so as to permit the same to rise and fall, and links depending from the said operating levers and connected at their lower ends with the valve, substantially as set forth.

2. In an automatic oil-regulator for continuously fed lamps, the combination with a lamp-fount, of a float located therein, a vertically adjustable feed-pipe extending downward into the fount and discharging downward at a point directly over the float, a valve consisting of an elastic pad interposed between the float and the discharge-end of the pipe, and of a horizontally arranged bar in which the said pad is mounted, a plurality of operating levers pivotally connected at their upper ends with the fount, and connected at their lower ends with the float, so as to permit the same to rise and fall, and links depending from the said operating-levers and connected at their lower ends with the said ends of the bar, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HERBERT S. PULLMAN.

Witnesses:

FRED C. EARLE,
ADA S. HOTCHKISS.