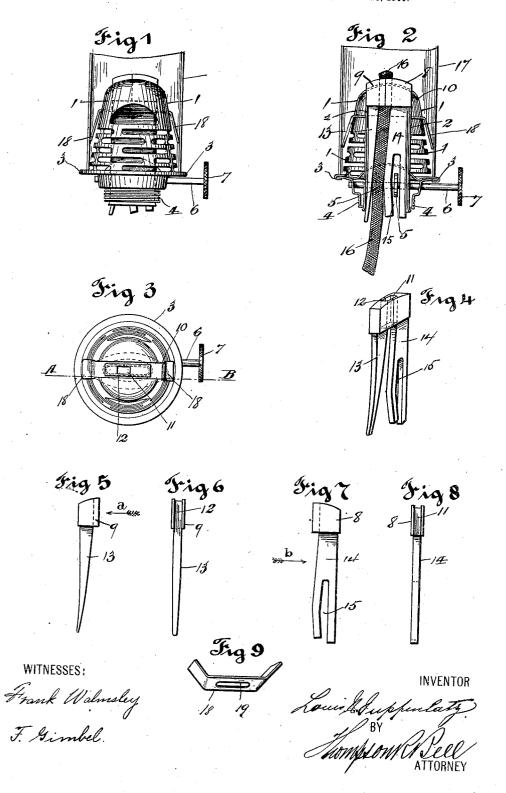
L. N. IUPPENLATZ.

GAS GENERATING ATTACHMENT FOR OIL LAMPS.
APPLICATION FILED AUG. 28, 1905. RENEWED JUNE 23, 1906.



UNITED STATES PATENT OFFICE.

LOUIS N. IUPPENLATZ, OF ORESTES, INDIANA, ASSIGNOR OF ONE-HALF TO ALVA FAVORS, OF ORESTES, INDIANA.

GAS-GENERATING ATTACHMENT FOR OIL-LAMPS.

No. 835,859.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Louis N. Iuppenlatz, a citizen of the United States, residing at Orestes, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Gas-Generating Attachments for Oil-Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a new wick-holder attachment for burners of oil-lamps; and it consists in the device described in the specification and particularly pointed out in the

The object of this invention is to provide an attachment to be applied to burners of oillamps whereby a narrow wick or a wick of very small width compared to that of the full-width wicks of the burner of the lamp to which the attachment is applied may be used, thereby reducing the amount of the flow of the oil and using the same with a maximum economy.

A further object is to provide means where-25 by the oil raised by capillary attraction and absorbed by that portion of the wick situated between the elements of which the generator is composed will be rapidly generated into gas to burn with a brilliant luminous flame, 30 thereby obtaining the maximum efficiency out of the oil with a minimum waste.

I attain these objects by means of the burner illustrated in the accompanying drawings, in which similar numerals of reference 35 designate like parts throughout the several

views.

Figure 1 is an elevational view of an oillamp burner, showing my invention of a generator applied thereto. Fig. 2 is a sectional 40 view of the same, taken through the line A B. (See Fig. 3.) Fig. 3 is a top view of an oil-lamp burner. Fig. 4 is a perspective view of my attachment for generating the gas from oil to be applied to oil-lamp burners. Fig. 5 45 is a side view of the single depending side liner, legged, or pronged section or portion of my oil-generator. Fig. 6 is an edge view of the same looking in the direction of the arrow a. (See Fig. 5). Fig. 7 is a detail side view of 50 the double depending side liner, legged, or pronged section or portion of my invention of an oil-generator attachment. Fig. 8 is an

edge view of the same looking in the direction

tail perspective view of the chimney-retain- 55

ing spring.

The burner of the lamp to which my attachment is applied may be of the conventional or any suitable form of construction used in coaloil lamps, and the same is composed of an 50 outer casing 1, a wick-guiding tube 2, situated within the outer casing 1, a chimney-supporting collar 3, and a screw-stem 4, whereby the burner is screwed to the oil-containing vessel of the lamp.

The burner is provided with the usual toothed wick-feeding wheels 5, which are secured on the stem 6 in position thereon to be situated within the wick-guiding tube 2 of the A turning-button 7 is secured on 70 the end of the stem 6 to turn said stem and the wick traversing therewith to move the wick upwardly or downwardly within the

wick-guiding tube 2. My invention of a rapid gas-generator for 75 oil-lamps is composed of a top, right, and left portions or heads 8 and 9, which are of a thickness to rest on the top edges of the tube 2 and at the same time not too thick to be passed through the slot 10, formed in the top 80

of the casing 1.

The inner vertically abutting or contacting sides of the right and left heads 8 and 9 are provided with the vertically - extending grooves 11 and 12, which when said heads 85 are in position on the top edge of said tube 2 to abut on their curved sides fall directly opposite each other or register to form a verticallyextending wick-guiding channel or way, through which the reduced wick to be used 90 in connection with this device passes.

From the bottom of the head 9 is the side liner or leg 13, which is adapted to fit within the tube 2 and has its reduced lower end projecting through and beyond the bottom end 95 of said tube 2. The side liner or leg 14, formed integral on the bottom of the head 8, also extends downwardly within the tube 2 to project beyond the bottom open end thereof.

A slot 15 is formed in the leg 14 to extend vertically from the bottom end to a point intermediate the top or root and bottom ends of said leg 14, and the said slot is provided to permit the right-hand wick-feeding wheel 105 to work therein.

It will be observed that the wick 16 is situof the arrow b, (see Fig. 7;) and Fig. 9 is a de- | ated between the side liners or legs 13 and 14 and contacts therewith to be guided or directed directly to the wick-opening formed in the heads 8 and 9. It will thus be seen that when the wick 16 is ignited at its top end or that end projecting above the heads 8 and 9 the flame thereof will be in close proximity to the top sides of said heads, which latter will by reason of the proximity of this flame be heated to a high temperature

heated to a high temperature. The side liners or legs 14 and 13 being formed integral with their heads 8 and 9 and said heads and side liners or legs 14 and 13 being of a good heat-conducting material, the heat applied to said heads 8 and 9 will be rs rapidly conducted downwardly along said side liners or legs 14 and 13, and the wick 16 being in contact with each of said side liners or legs the oil absorbed thereby or by that portion of the wick situated between and con-20 tacting with them will be rapidly generated into a gas. It is clear that this arrangement of generation of oil into a gas will be very rapid, and the wick being of a small dimension compared with a wick that would be required 25 for use in connection with the wick-guiding tube 2 a small amount of oil will be drawn by capillary attraction by said wick. amount of fluid therefore carried by the wick 16 being very small and the temperature of

30 the side liners or legs 14 and 13 being very high, the generating process would necessarily be rapid, thereby resulting in a more perfect and brilliant combustion at the top end of the wick 16.

The chimney 17, which may be straight or any form, rests on the collar 3 and is retained by a spring centering means, such as the chimney-retaining spring 18. The spring 18 is preferably constructed of a strip of resilient metal, as steel, and is provided with the slot 19, which is of a size sufficient to loosely fit around the top portion of the tube 2, thereby permitting said spring 18 to rest at the bot-

tom of the slot-opening 10 of the casing 1.

Having thus fully described this my invention, what I claim as new and useful, and desire to cover by Letters Patent of the United

States therefor, is—

1. In a gas-generating attachment for oillamp burners comprising side liners situated of the burner of the lamp on each side of the wick thereof and contacting with the latter and means for supporting said liners in position in said burner to extend downwardly within the latter.

2. In a gas-generating attachment for oillamp burners comprising side liners situated in the burner of the lamp on each side of the wick thereof and contacting with the latter, heads on the top of said liners adapted to project over the top edge of said burner and depending liners or legs extending downwardly within said burner.

3. A gas-generating attachment for oillamp burners comprising right and left hand 65 abutting head portions each head portion provided with vertically-extending opposing grooves, which heads when placed in position on the wick-tube of said burner said grooves form a reduced wick-guiding way or duct.

4. A gas-generating attachment for oil-lamp burners comprising right and left hand abutting head portions each head portion provided with vertically-extending opposing grooves, which heads when placed in position 75 on the wick-tube of said burner said grooves form a reduced wick-guiding way or duct, depending legs extending downwardly from said heads and within said wick-guiding tube to contact with the edges of said wick.

5. A wick-guiding attachment for oil-lamp burners comprising a head portion provided with a vertically-extending centrally-situated reduced wick-opening resting on the top of the wick-guiding tube, depending arms situated at each side of said opening and extending from said head downwardly within said tube on each side of said reduced wick to contact with and direct the latter toward the wick-opening.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS N. IUPPENLATZ.

Witnesses:

HORACE LUKENS, MAURICE BIRELEY.