F. J. ALLISON.

OIL LAMP. Patented June 11, 1889. No. 405,065.

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INVENTOR:

United States Patent Office.

FREDERICK JOHNSON ALLISON, OF PLAISTOW, COUNTY OF ESSEX, ENGLAND.

OIL-LAMP.

SPECIFICATION forming part of Letters Patent No. 405,065, dated June 11, 1889.

Application filed December 19, 1888. Serial No. 294,028. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK JOHNSON ALLISON, paint-manufacturer, a subject of the Queen of Great Britain, residing at 23 Gordon Street, Plaistow, in the county of Essex, England, have invented a new and useful Improvement in the Construction of Oil - Lamps which are Self - Extinguishing when Upset, of which the following is a specification.

The object of this invention is to produce a simple and efficient oil-lamp which is self-extinguishing when upset, and in which the danger of explosion from the hydrocarbon vapor becoming overheated is minimized.

The reservoir of the lamp is constructed on the principle of the unspillable ink-bottle, and the aperture through which the oil is fed when refilling is so placed that no more oil can 20 be fed into the reservoir than will occupy more than at most one-half the capacity of the reservoir, so that no oil will flow through the central channel when the lamp is upset. Over the outside of the wick-tube an outer 25 tube with wing-shaped projections is loosely placed, so that when the lamp is upset this outer tube will fall until the wing-shaped projections thereon rest against the inside of the top of the burner, the outer tube thus 30 forming a temporary elongation of the wicktube and effectually extinguishing the light in the same manner as if the wick were turned down into the wick-tube.

And in order that my invention may be more fully understood and carried into practice, I will now proceed to describe the same with reference to the accompanying drawings, in which similar letters indicate corresponding parts in all the figures.

Figure 1 is a partly-sectional elevation of a lamp constructed according to this invention. Fig. 2 is a plan thereof, and Fig. 3 is a section of the extinguishing-tube.

The body of the lamp is provided with two central inverted truncated-cone-shaped shields or baffles A and B, the conical chamber C between them serving to keep cool

the vapor in the upper part D of the reservoir.

E is the screw-cap on the aperture f, through 50 which the oil is fed when the lamp is being replenished, the said aperture leading into a channel F branching off from the bottom part G of the reservoir of the lamp.

In Fig. 1 the lamp is shown fully charged 55 with oil when it has been replenished by placing the lamp upon a table or other flat surface and the oil fed through the aperture f. When so replenished, the oil just reaches to the bottom, or nearly so, of the shield or 60 baffle A. If, now, the lamp is upset, the oil will run into the upper part D of the reservoir, which is made of such capacity that it will hold more oil than can be fed into the lamp through the aperture f in the manner 65hereinbefore described. Should any of the oil be jerked or otherwise passed into the conical chamber C, the inner baffle B will prevent it from flowing into the burner J. At the same time, when the lamp is upset, the 70 outer tube K will slide along the wick-tube M until the curved or wing-shaped projections L thereon rest against the top of the inside of the burner J, thus forming an elongation of the wick-tube M extending to the 75 top of the inside of the burner. The dotted lines shown in Fig. 1 represent the position of the extinguishing-tube K and the projections L when the lamp is upset. When the lamp is set upright again, the extinguishing- 80 tube K will slide over the outside of the wicktube M until it falls into its normal position, and the oil will occupy the bottom part of the reservoir, as before.

In the drawings a cheap form of lamp is 85 shown with a handle H and a flat wick; but it is obvious that the same construction of lamp can be made to fit into a separate stand, or may be otherwise constructed as to its outward form or design, and may be pro- 90 vided with a circular wick, if desired, without departing from the nature of my invention. In the case of a circular-wick lamp it will only be necessary to make the extinguishing-tube

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K a double tube instead of a single tube, as shown in Fig. 3.

What I claim is—

A lamp-reservoir having two shields or baffles A and B and a feeding-aperture f below the level of the bottom of the shield or baffle B, the capacity of the upper part D of the reservoir being at least one-half that of the entire reservoir, substantially as

and for the purpose hereinbefore set forth, 10 and illustrated in Figs. 1 and 2.

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