PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Blow Lamps

We, HARRY JOHN MEADS, of The Cottage, Leinthill Starkes, and ALBERT WEST-MEADS, of Kohat, Bromfield Road, Ludlow, both in the County of Salop, and both British Subjects, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement :—

This invention relates to hand operated blow lamps of the kind used by, for example, painters and plumbers, and comprising a liquid fuel container from which liquid fuel can be supplied to a vaporiser and burner mounted on the upper part of the container. In a lamp of conventional construction the fuel is supplied from the container to the vaporiser through a delivery pipe depending in the container, the fuel being forced upwardly through the said pipe by air under pressure in the upper part of the container. When working in an awkward position, such a lamp is sometimes used in an inverted condition, but as the quantity of fuel then available is the relatively small amount contained in the delivery pipe, it is necessary at frequent intervals to return the lamp to its normal position for the purpose of re-filling the said pipe, a condition which involves inconvenience to the user.

The object of the present invention is to enable the said inconvenience to be obviated, and the invention comprises a blow lamp having in the fuel container an inverted sub-container which is open at its lower end and has its upper end in communication with the vaporiser.

In the accompanying drawings :—

Fig. 1 is a sectional side elevation of the portion of a blow lamp embodying the invention; and Fig. 2 is a similar view to Fig 1 showing the lamp in the inverted position.

Referring to the drawings there is provided in the main fuel container *a* which forms the body part of the lamp, a sub-container *b* having an open lower end and of such capacity as will enable the lamp to be used in an inverted condition for an adequate time without need for replenishment. In the example shown the sub-container is made about one-half the diameter of the main container. The sub-container is mounted centrally in the main container and extends from the upper end to near the base of the main container. At its upper end the sub-container is arranged in communication with the vaporiser mounted externally on the upper end of the main container, and of which only the part *c* is shown in the drawings.

We find it necessary to retain the usual delivery pipe *d* which is mounted centrally within the sub-container, with its lower open end extending slightly below the lower open end of the sub-container. At its upper end the delivery pipe is connected to the vaporiser in the usual manner, and the upper end of the sub-container is arranged in communication with the upper end of the said pipe.

In the example shown in the drawings, there is secured to the upper end of the container *a* a hollow and externally screw-threaded fitting *e* into which extends one end of the vaporiser *c*, and on the latter is formed or secured a collar *f* which abuts on the outer end of the said fitting, the vaporiser being secured to the fitting by a union nut *g*. The upper end of the delivery pipe enters the adjacent end of the vaporiser in a manner which provides an annular passage *h* through which liquid can flow to the vaporiser from the sub-container. The pipe *d* is held in position by a perforated plate *i* secured within the sub-container.

When the lamp is in use in the normal manner, the liquid *j* occupies both containers as shown in Fig. 1, and is forced therefrom to the vaporiser by the pressure

of air in the upper region *k* of the main container, this air being supplied in the usual manner by a small hand pump (not shown) on the main container. When the lamp is inverted as shown in Fig .2, the air then passes to the region *m* and forces liquid from the sub-container to the vaporiser.

By the present invention the lamp can be used with almost equal convenience in either the upright or inverted position.

What we claim is:—

1. A blow lamp of the kind specified having in the main container, an inverted sub-container which is open at its lower end and has its upper end in communication with the vaporiser.

2. A blow lamp as claimed in Claim 1, having within the sub-container a delivery pipe which is open to the main container at its lower end and which communicates at its upper end with the vaporiser.

3. A blow lamp as claimed in Claim 2, in which the upper end of the delivery pipe forms with the adjacent end of the vaporiser an annular passage in communication with the sub-container.

4. A blow lamp of the kind specified comprising a sub-container arranged within a main container, substantially as and for the purpose described and as illustrated by the accompanying drawings.

MARKS AND CLERK.

PROVISIONAL SPECIFICATION

Blow Lamps

We, HARRY JOHN MEADS, of The Cottage, Leinthill Starkes, and ALBERT WESTMEADS, of Kohat, Bromfield Road, Ludlow, both in the County of Salop, and both British Subjects, do hereby declare this invention to be described in the following statement:—

The invention relates to hand operated blow lamps of the kind used by, for example painters and plumbers, and comprises a liquid fuel container from which liquid fuel can be supplied to a vaporiser and burner mounted on the upper part of the container. In a lamp of conventional construction the fuel is supplied from the container to the vaporiser through a delivery pipe depending in the container, the fuel being forced upwardly through the said pipe by air under pressure in the upper part of the container.

When working in an awkward position, such a lamp is sometimes used in an inverted condition, but as the quantity of fuel then available is the relatively small amount contained in the delivery pipe, it is necessary at frequent intervals to return the lamp to its normal position for the purpose of re-filling the said pipe, a condition which involves inconvenience to the user.

The object of the present invention is to enable the said inconvenience to be obviated, and the invention comprises a blow lamp having in the fuel container an inverted sub-container which is open at its lower end and has its upper end in communication with the vaporiser.

In carrying the invention into effect there is provided in the fuel container of the lamp, a sub-container of such capacity as will enable the lamp to be used in an inverted condition for an adequate time without need for replenishment. Thus in one example the sub-container is made about one-half the diameter of the outer, or main, container. The sub-container is mounted centrally in the main container and extends from the upper end to near the base of the main container. At its upper end the sub-container is arranged in communication with the vaporiser mounted externally on the upper end of the main container.

We find it necessary to retain the usual delivery pipe. This is mounted centrally within the sub-container, with its lower open end extending slightly below the lower open end of the sub-container. At its upper end the delivery pipe is connected to the vaporiser in the usual manner, and the upper end of the sub-container is arranged in communication with the upper end of the said pipe.

When the lamp is in use in the normal manner, an adequate volume of liquid occupies the sub-container, and when the lamp is inverted, the vaporiser is supplied from the sub-container under the pressure of the compressed air in the main container.

By the present invention, the lamp can be used with almost equal convenience in either the upright or the inverted position.

MARKS AND CLERK.

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695,742 COMPLETE SPECIFICATION
1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

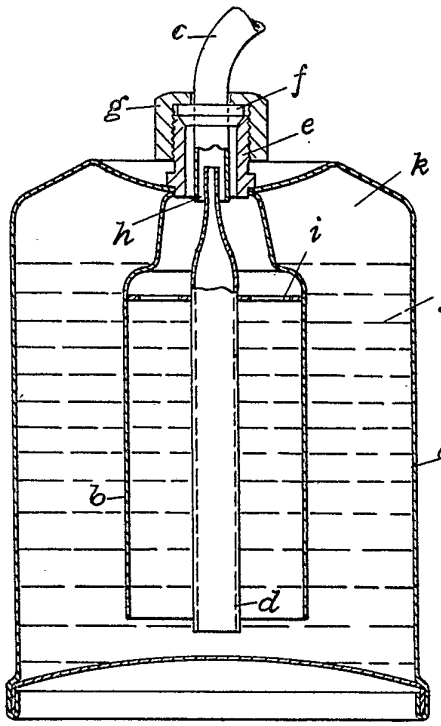

Fig.1

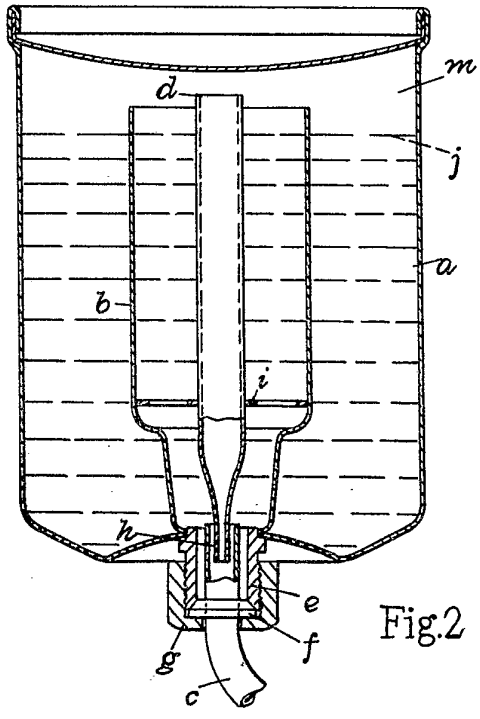

Fig.2