

PATENT SPECIFICATION

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COMPLETE SPECIFICATION.



Improvements in Oil Burners.

We, T. G. BLOOD LIMITED, a Company registered under the Laws of Great Britain, of 32—38, William Street North, Summer Lane, Birmingham, and SYDNEY HARRY SHERWOOD, of 44, Granville Street, Birmingham, British Subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to wick burners for oil lamps or stoves employed for heating, boiling, lighting and similar purposes, the said burners being of the central-draught type used in conjunction with an annular wick.

The object of the invention is to provide a simplified and more efficient form of blue-flame oil burner which will give an intense heat with no smell.

A cap for a non-luminous flame burner has been proposed having perforations in its sides adjacent to the flame and having a flat apertured deflecting plate or crown surmounted by a circular top chamber or cover with a flat unperforated top and perforated side walls, the said chamber being attached by a central bolt and being for the purpose of delivering a secondary air supply to the upper part of the flame.

According to the present invention, however, a blue-flame oil burner of the central draught type comprises, in combination with the central air-shaft, a spreader cap at the upper end of the central air-shaft having perforations in its sides adjacent the flame, the said cap having an apertured crown or top, and a plate or member surmounting the said crown and vertically spaced therefrom to form between the two parts a space which is entirely open at the sides.

The plate or member which surmounts the cap may be perforated, and is preferably of a dished or conical form.

Figure 1 of the accompanying drawing represents a vertical section, partly in elevation, of the improved burner.

Figure 2 is a side elevation of the spreader device removed from the burner.

Figure 3 is a plan of the same, and Figure 4 is an underside view.

[Price 1/-]

The burner comprises the usual central air-shaft 1 passing through the oil container 2 to the bottom thereof, an annular wick 3 around the air-shaft, and a wick carrier tube 4 adapted to be raised and lowered by any known or suitable mechanism, a metal chimney 5, fitted with an inspection window 6, surrounding the burner.

According to the present invention, removably fitted in the upper open end of the air-shaft 1 is a spreader device consisting of a cylindrical cap or tube 7 the lower end of which rests upon an internal shoulder 8 of the air-shaft while its upper end, which projects above the said air-shaft and above the wick, is provided in its circumferential wall with a series of perforations 9 situated adjacent the flame and through which issues the greater portion of the central draught. The spreader cap 7 is provided with a depressed crown or top 10 pierced with several small holes 11, three such holes being shown in the drawing. Fixed upon the crown 10, by a central rivet 12, is a superimposed dished plate or cup-like part 13 which is vertically spaced from the said crown 10 so as to form between the two parts a space which is entirely open at the sides. The plate 13 is pierced with several small holes 14 in alignment with and corresponding in number to the holes 11 in the crown 10. A proportion of the central air supply can thus pass through the holes in the crown 10 and between the said crown and the plate 13 and also through the holes 14 in the latter. 15 represents a crown or cap carrying the chimney 5 and resting upon the gallery 16.

By means of the arrangement described it is found that an intensely hot blue flame is maintained.

If desired, the member 13 may be of conical form. If the burner is to be used for lighting purposes, an incandescent mantle can be employed therewith.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A blue-flame oil burner of the cen-