(No Model.)

C. WHITTINGHAM.

OIL BURNER.

No. 550,704. Patented Dec. 3, 1895.

Fig. 1.

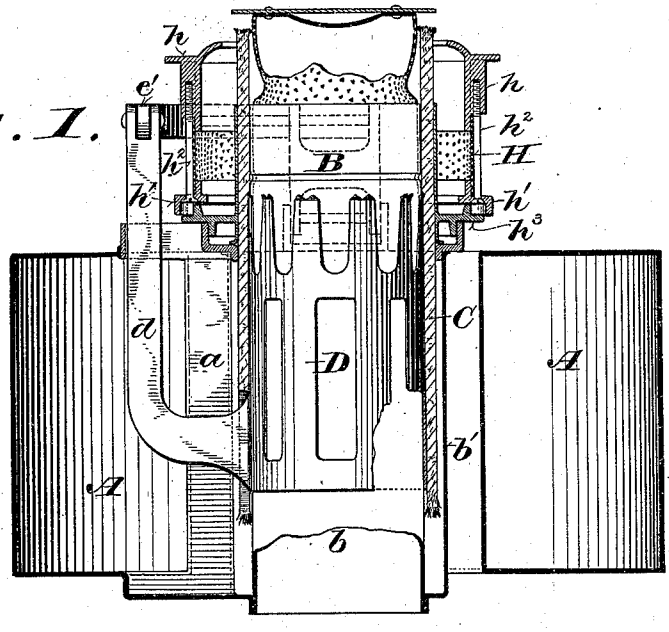
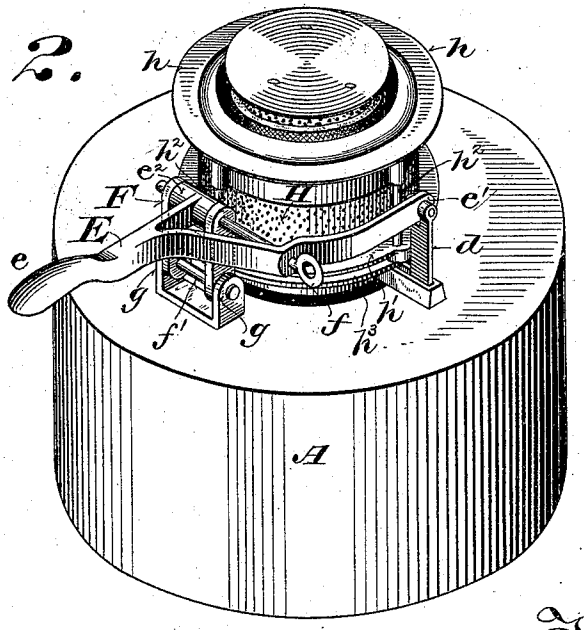


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES WHITTINGHAM, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE WESTERN STOVE AND MANUFACTURING COMPANY, OF WISCONSIN.

OIL-BURNER.

SPECIFICATION forming part of Letters Patent No. 550,704, dated December 3, 1895.

Application filed July 19, 1895. Serial No. 556,534. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WHITTINGHAM, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Oil-Burners; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to facilitate the adjustment and renewal of the wick and generally to simplify and improve the construction and operation of devices of this class.

It consists of certain novel features in the construction and arrangement of the component parts of the burner, as hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings, like letters designate the same parts in both figures.

Figure 1 is a central vertical section of a burner embodying my improvements. Fig. 2 is a perspective view of the same.

A designates the oil-reservoir; B, the burner, comprising an inner tube *b* and an outer concentric tube *b'*, inclosing an annular space between them for the reception of the wick C. This space communicates with the reservoir A, which is preferably made of annular form to surround the burner and to form a vertical air space or passage between them. An air space or passage is thus provided both inside and outside of the annular wick-space, and an ample supply of air to the burner is secured and danger from overheating the oil is avoided.

D is the wick-holder, which may be conveniently made of sheet metal in the form of an open cylindrical frame to fit inside of and engage with the tubular wick C, as shown in Fig. 1. It is provided on one side with an upwardly-extending arm *d*, rigidly attached thereto at or near its lower end. This arm is adapted to be moved up and down in a vertical opening or passage *a*, constituting a communication between the reservoir A and the annular wick-space of the burner.

E is a wick-lifting and adjusting lever formed at one end with a handle *e*, at the opposite end with an offset arm *e'* to pass around the burner and connected with the upper end of the arm *d* to which it is pivoted, and at an intermediate point with a transverse sleeve or hub e^2, constituting its pivot or fulcrum connection. The sleeve e^2 is fitted between the upper ends of a double link or frame F and is pivotally connected therewith by a removable pivot-pin *f* passing through them and the arm *e'*, as shown in Fig. 2. At its lower ends the double link or frame F is pivoted on a pin *f'*, parallel with the pin *f*, to ears *g g* on a plate or bracket attached to the top or reservoir A. By means of this pivot or fulcrum connection of the lifting-lever E the pivot connection of the arm *e'* with the arm *d* is permitted to move up and down in a straight line without causing the arm *d* to bind in the opening or passage in which it is inserted in the reservoir, and the force applied to said lever for lifting the wick up and down is applied to the wick-holder in a direction parallel to its axis, thus preventing its binding in or upon the burner-tubes and causing it to move easily and evenly.

Heretofore the cap surrounding the upper end of the burner has usually been constructed entirely of perforated sheet metal, which is liable to be easily bent and cause trouble and annoyance in replacing it upon the base to which it is fitted. I construct this cap of annular top and bottom castings *h* and *h'*, which are tied and held together by rods or screws h^2. Between them is held a band of perforated sheet metal H, which affords the necessary supply of air into the cap. The edges of this perforated sheet-metal band overlap and are held in place by rims or flanges formed for the purpose on the castings *h h'*. The lower casting *h'* has a flange on the under side which fits over a flange formed on the upper side of a ring h^3, surrounding the burner above the reservoir. By means of this construction the bending and distortion of the cap is prevented and its removal from and application to the burner are greatly facilitated.

I do not wish to be understood as limiting myself to the exact details of construction herein shown and described, as they may

be variously modified in minor particulars within the spirit and intended scope of my invention.

I claim—

1. In an oil burner the combination with a wick-holder provided on one side with an upwardly extending arm attached thereto, of a lifting lever pivoted to said arm and having a link fulcrum connection with a suitable fixed support, substantially as and for the purposes set forth.

2. In an oil burner the combination with a wick-holder adapted to be inserted in and engage the inside of a tubular wick, and provided on one side with an arm rigidly attached thereto parallel with the axis of the burner, a lever having a handle at one end and an offset arm at the other end pivoted to the upper end of the arm on the wick-holder, and a link connecting said lever at an intermediate point with a suitable fixed support centrally with respect to the burner, substantially as and for the purposes set forth.

3. In an oil burner the combination of a wick-holder adapted to be inserted in and to engage the inside of a tubular wick, and provided with an arm rigidly attached thereto parallel with the axis of said burner, a lever having a handle at one end, an offset arm at the other, pivoted to the upper end of the arm on said wick-holder, and an intermediate transverse sleeve constituting a fulcrum connection for said lever, and a double link or frame pivoted at its upper end to said sleeve by a removable pin passing through them and the offset arm of said lever, and at its lower end in a line parallel with said pin to a fixed support, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES WHITTINGHAM.

Witnesses:

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L. KREIELSHEIMER.