

F. T. SUHR.
APPARATUS FOR BURNING HYDROCARBONS.

No. 77,124.

Patented Apr. 21, 1868.

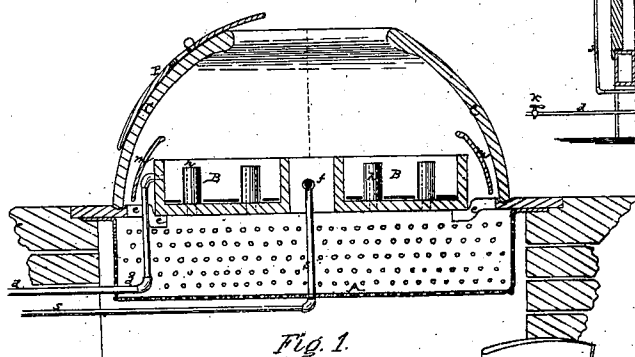


Fig. 1.

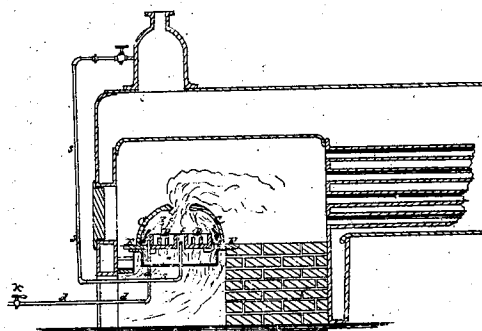


Fig. 4.

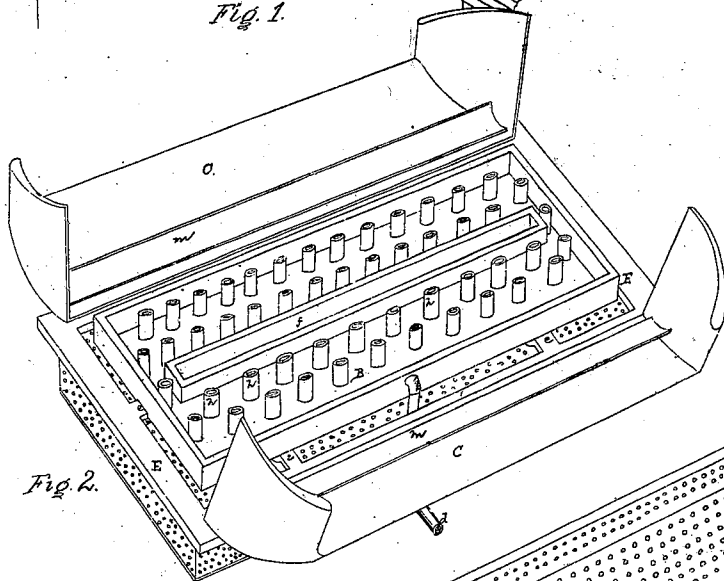


Fig. 2.

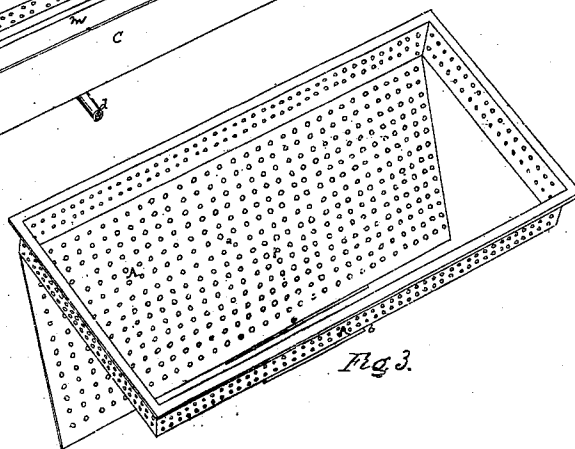


Fig. 3.

Inventor
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Witnesses
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FREDERICK T. SUHR, OF TITUSVILLE, PENNSYLVANIA.

Letters Patent No. 77,124, dated April 21, 1868; antedated April 7, 1868.

APPARATUS FOR BURNING HYDROCARBON.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FREDERICK T. SUHR, of Titusville, Crawford county, and State of Pennsylvania, have invented a new and improved Mode of Burning Crude Petroleum or other Combustible Fluids; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a cross-section,

Figure 2, a perspective view, showing the cap or covers thrown back.

Figure 3, a perspective view of the perforated draught-pan, showing the falling bottom; and

Figure 4, a longitudinal section of a boiler, with the apparatus in position, as applied to it.

My invention consists in a frame, E, with the projecting lugs or brackets, *e e*, and holding in its place the perforated draught-pan A. Upon the lugs or brackets *e e* rests the oil-dish B, having a rectangular opening, *f*, in the centre, and the upright tubes *h h* for the admission of air from the draught-pan to every part of the oil or fluid, which is fed into the oil-dish around the tubes by the pipe *d*, and regulated by an ordinary stop-cock,

The whole is covered by the cap C, cast, for convenience, in two parts, and having an opening between them for the escape of the flame.

A jet of dry steam from the dome or upper part of the boiler is fed into the opening *f*, by the pipe S, for the purpose of acting as a blower, to increase the draught. In any place where an air-blower is used, the pipe S is used to conduct atmospheric air for the same purpose.

The draught-pan A has a falling bottom, *a*, fastening by a catch, *b*, for the purpose of better reaching any part of the apparatus, to arrange or clean out.

The caps or covers C C have an inside partition, *m m*, for the purpose of projecting part of the air-current more directly across the tops of the tubes; also on the outside of the front cap or cover, is a slide, P, for the purpose of reducing and regulating the opening between the two halves of the cover.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The cap or cover C, together with the inside partitions *m m*, and the reducer P, for the purpose of confining and directing the currents of air upon the flame before they can pass out of the opening at the top.
2. The combination of the frame, draught-pan, oil-dish, and covers, as above described, all so placed, airtight, in the fire-box or chamber, that no air can pass into the said fire-box, except such as passes through the draught-pan aforesaid, for the purpose of producing heat from crude petroleum or other combustible fluids.

FRED. T. SUHR.

Witnesses:

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